

The foundations of economics

VISIT...

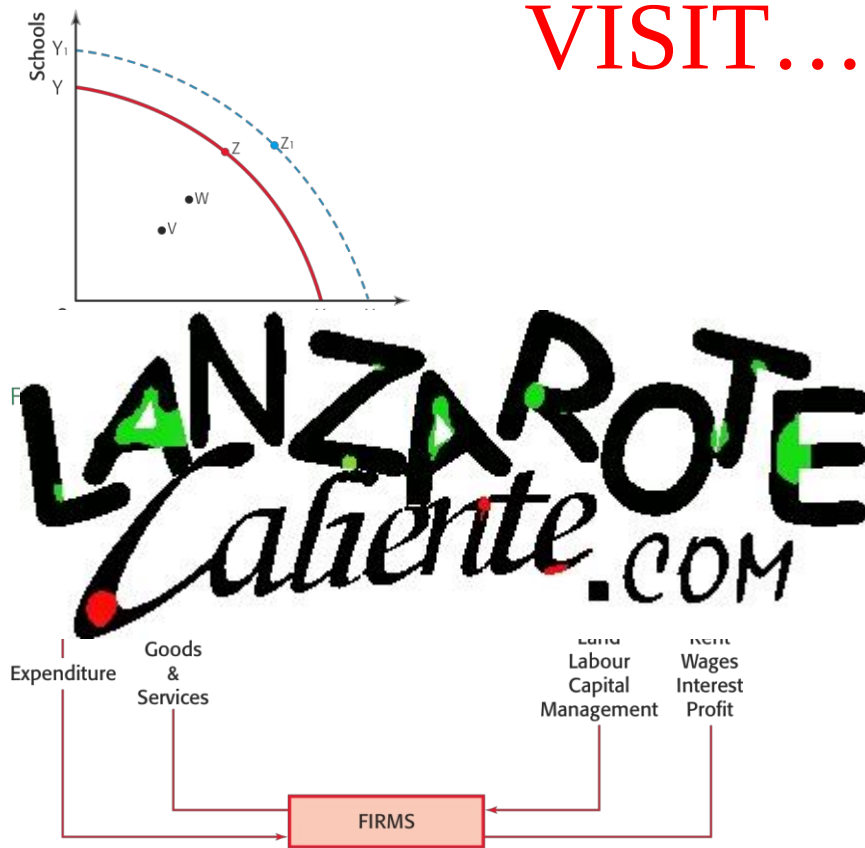


Figure 1.2 The circular flow of income

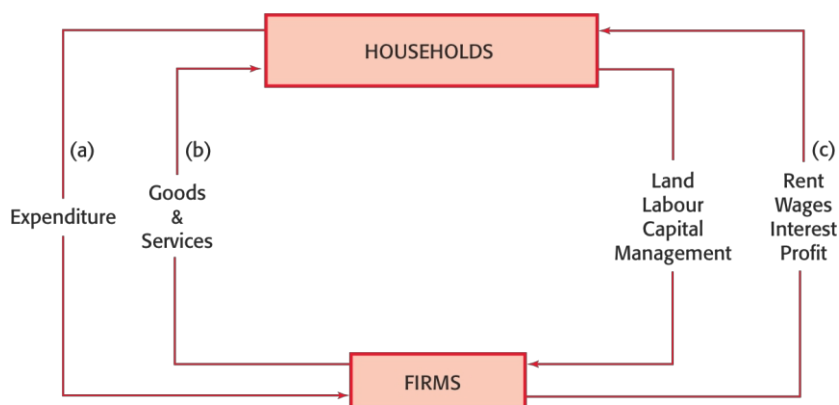
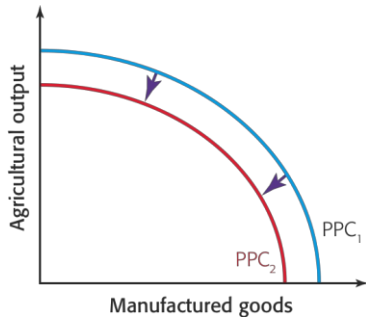


Figure 1.3 The different methods of measuring national income

The foundations of economics



Demand and supply

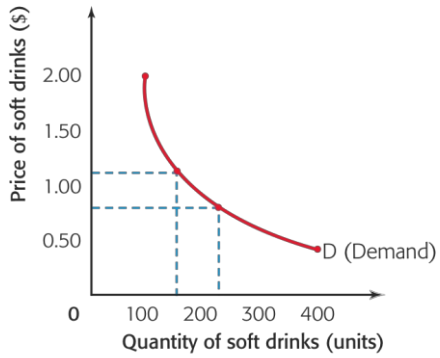


Figure 2.1 A demand curve for soft drinks

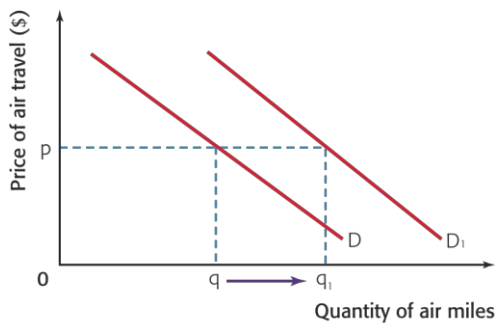


Figure 2.2 The demand for air travel

Demand and supply

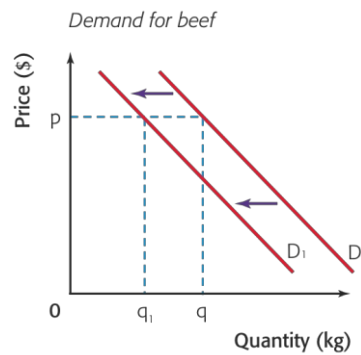
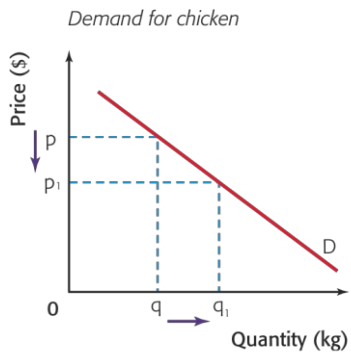


Figure 2.3 The demand for chicken and beef



Figure 2.4 The demand for DVD players and DVDs

Demand and supply

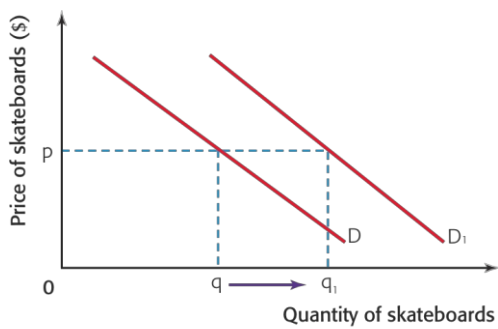


Figure 2.5 The demand for skateboards

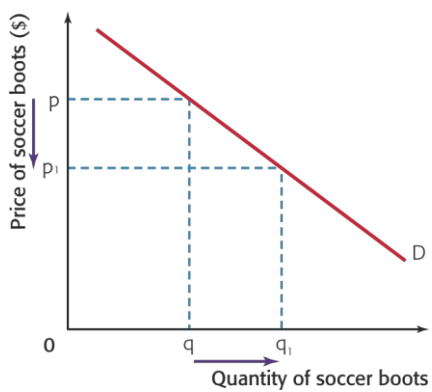


Figure 2.6 The demand for soccer boots

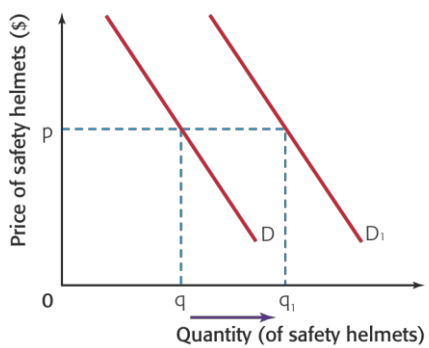


Figure 2.7 The demand for safety helmets

Demand and supply

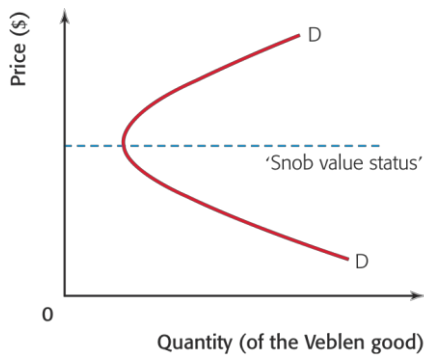


Figure 2.8 The demand for a Veblen good

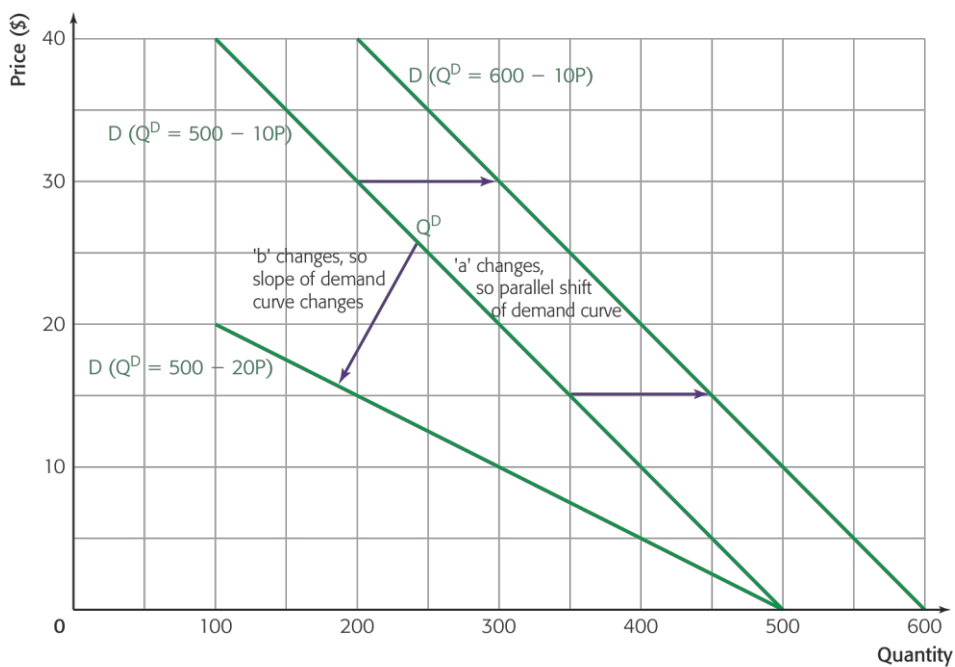


Figure 2.9 Demand curves from different demand functions

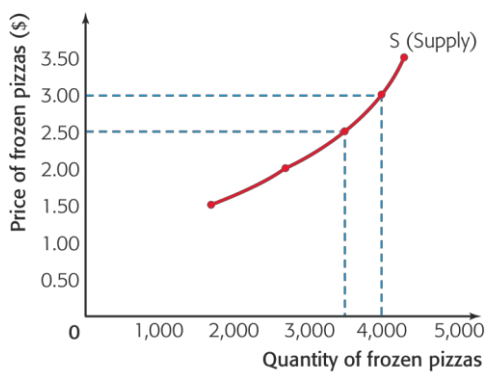


Figure 2.10 A supply curve for frozen pizzas

Demand and supply

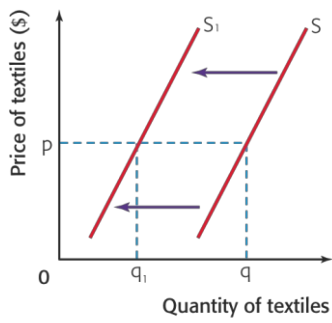


Figure 2.11 The supply of textiles

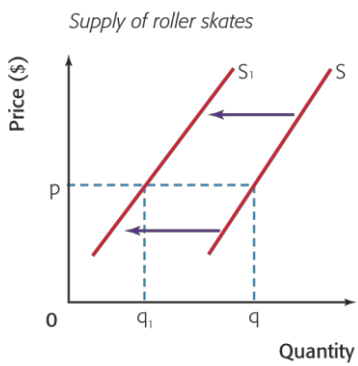
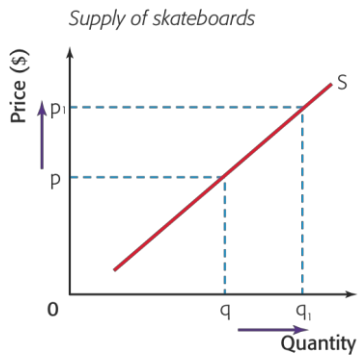


Figure 2.12 The supply of skateboards and roller skates

Demand and supply

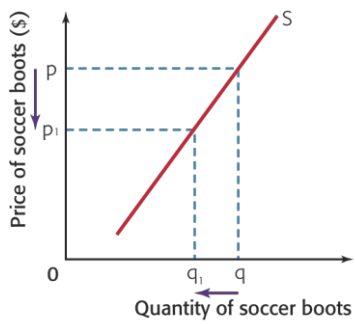


Figure 2.13 The supply of soccer boots

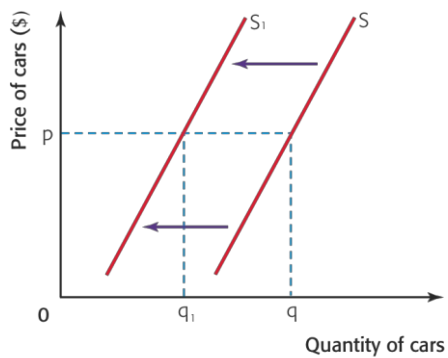


Figure 2.14 The supply of cars

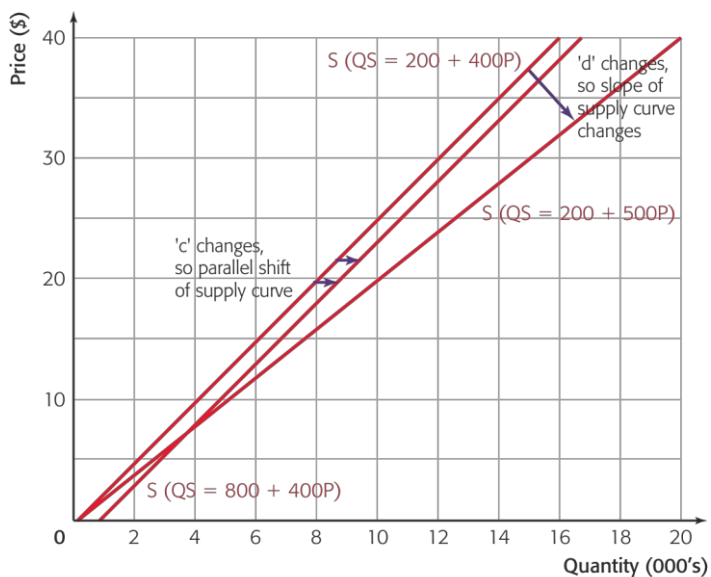


Figure 2.15 Supply curves from different supply functions

Market equilibrium, the price mechanism, and market efficiency

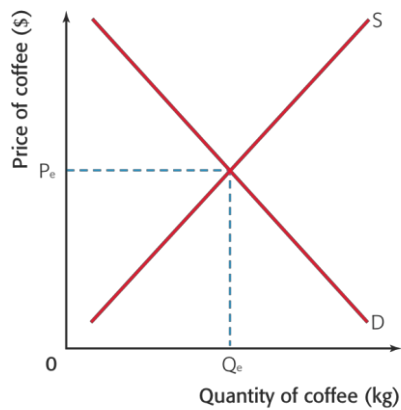


Figure 3.1 The market for coffee

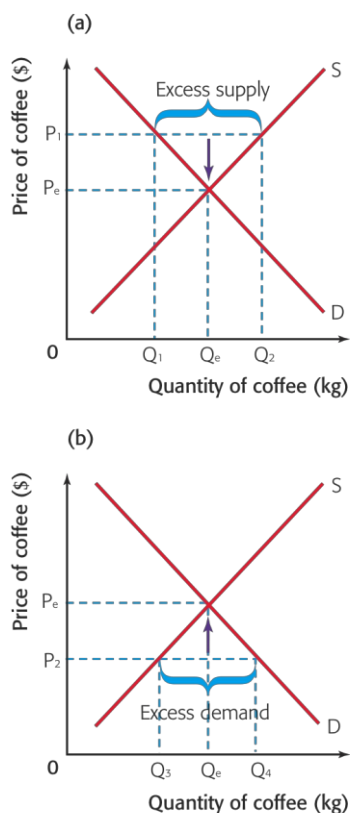


Figure 3.2 The market for coffee

Market equilibrium, the price mechanism, and market efficiency

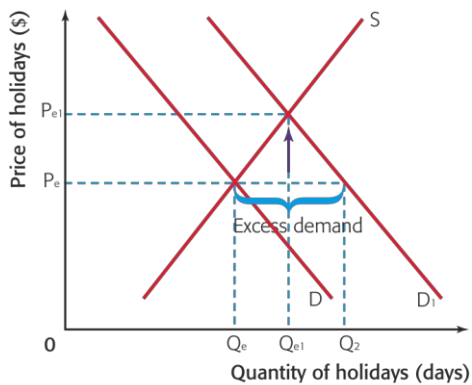


Figure 3.3 The market for foreign holidays

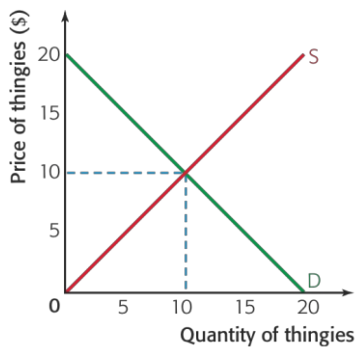


Figure 3.4 The market for things

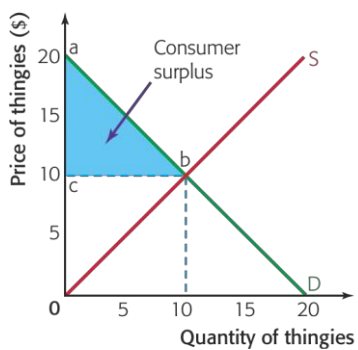


Figure 3.5 Consumer surplus in the market for things

Market equilibrium, the price mechanism, and market efficiency

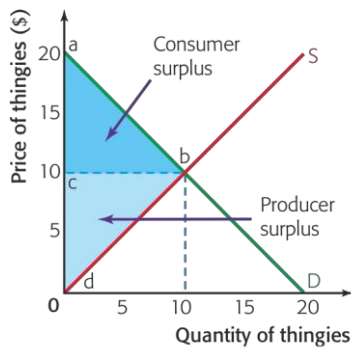


Figure 3.6 Producer surplus in the market for thingsies

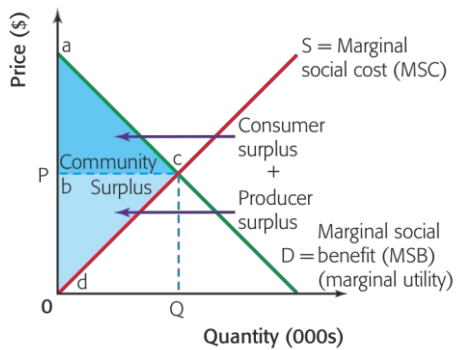


Figure 3.7 Community surplus

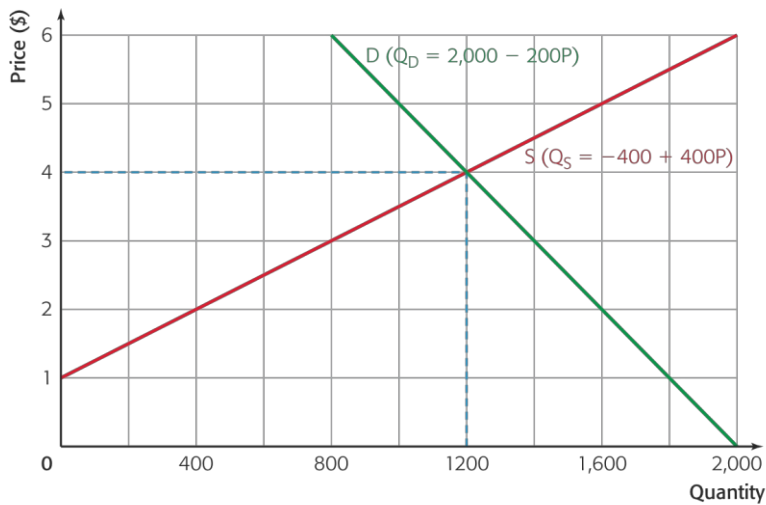


Figure 3.8 Demand and supply curves from different demand and supply functions

Market equilibrium, the price mechanism, and market efficiency

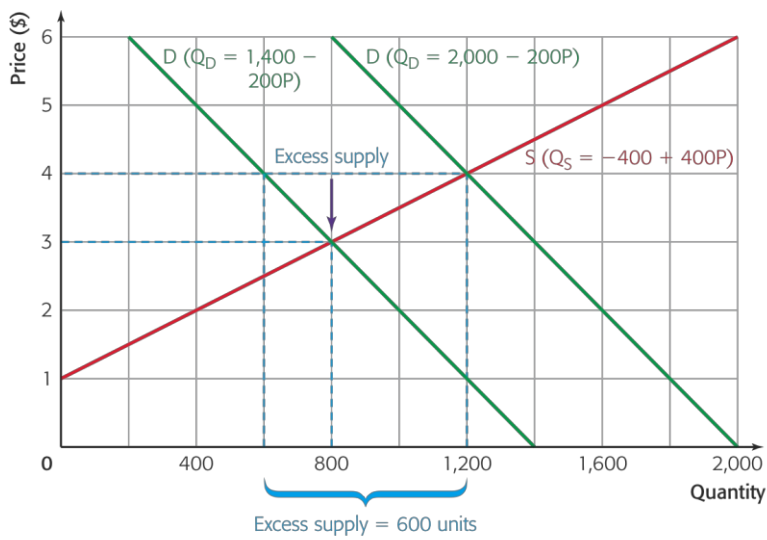


Figure 3.9 The addition of a new demand curve

Elasticities

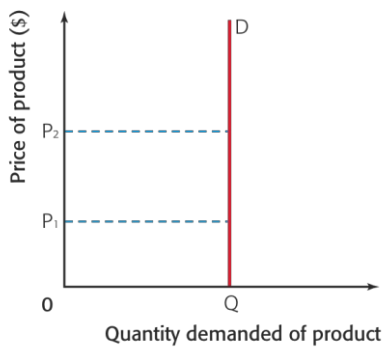


Figure 4.1 A perfectly inelastic demand curve

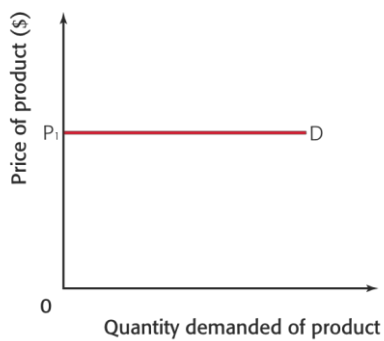


Figure 4.2 A perfectly elastic demand curve

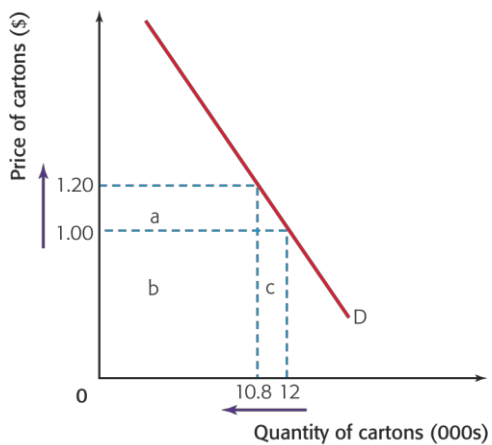


Figure 4.3 The demand for strawberry yoghurt

Elasticities

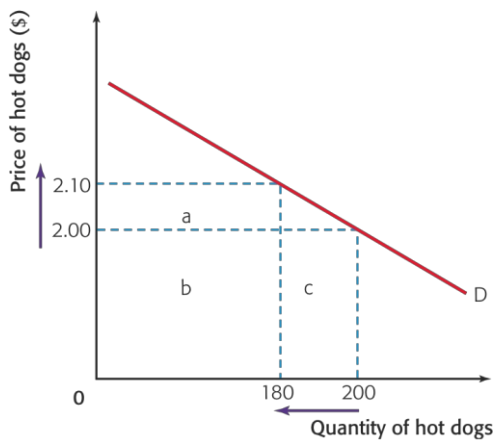


Figure 4.4 The demand for hot dogs

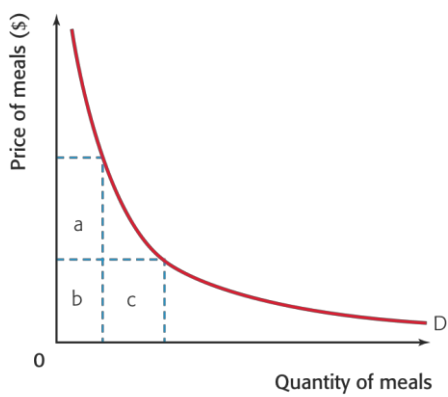


Figure 4.5 A rectangular hyperbola, where $PED = 1$ at every point

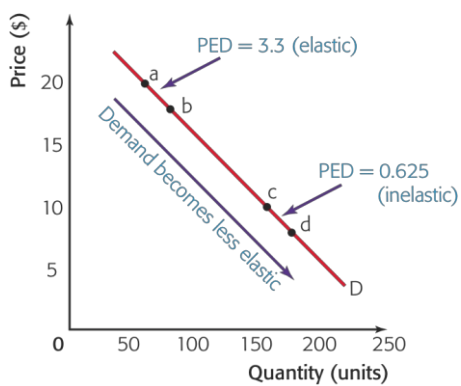


Figure 4.6 PED values for a normal demand curve

Elasticities

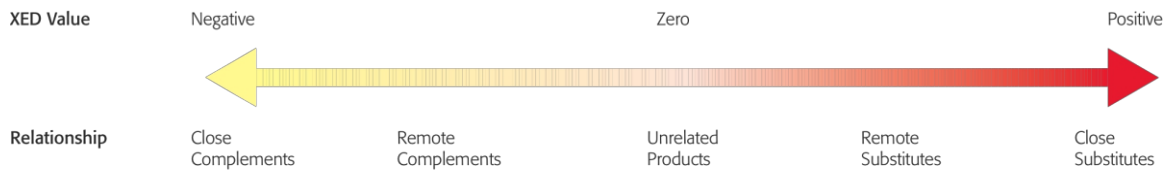


Figure 4.8 XED values and the strength of the relationship between products

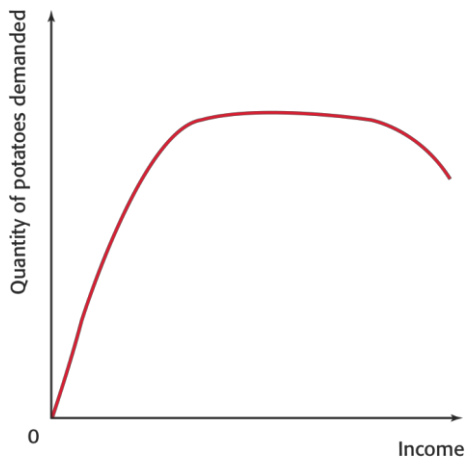


Figure 4.9 An Engel Curve showing the relationship between income and the demand for potatoes

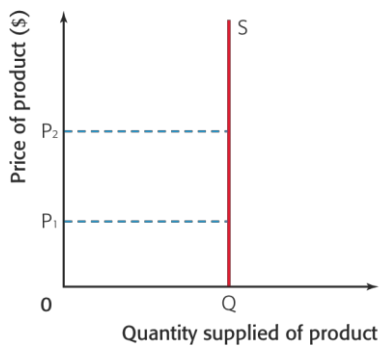


Figure 4.10 A perfectly inelastic supply curve

Elasticities

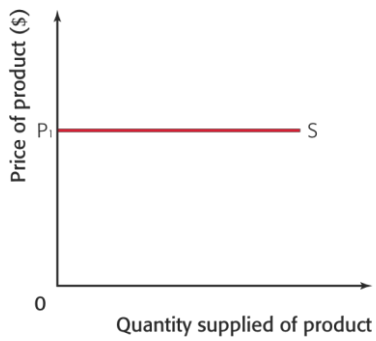


Figure 4.11 A perfectly elastic supply curve

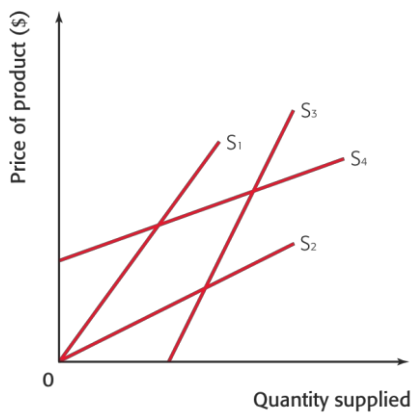


Figure 4.12 Supply curves with different values of PES

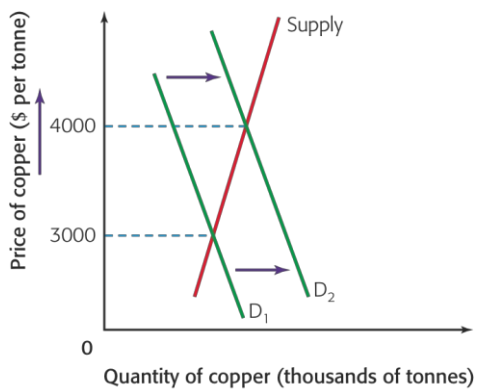


Figure 4.13 The market for copper

Indirect taxes, subsidies, and price controls

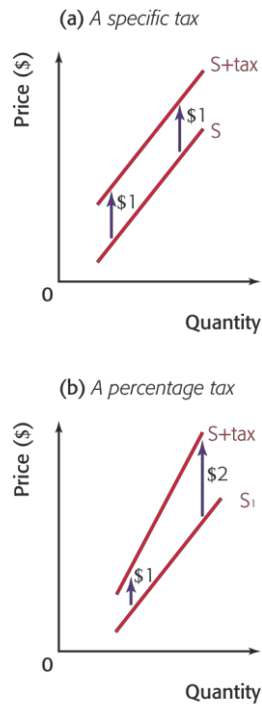


Figure 5.1 The effect on a supply curve of different types of indirect taxes

Indirect taxes, subsidies, and price controls

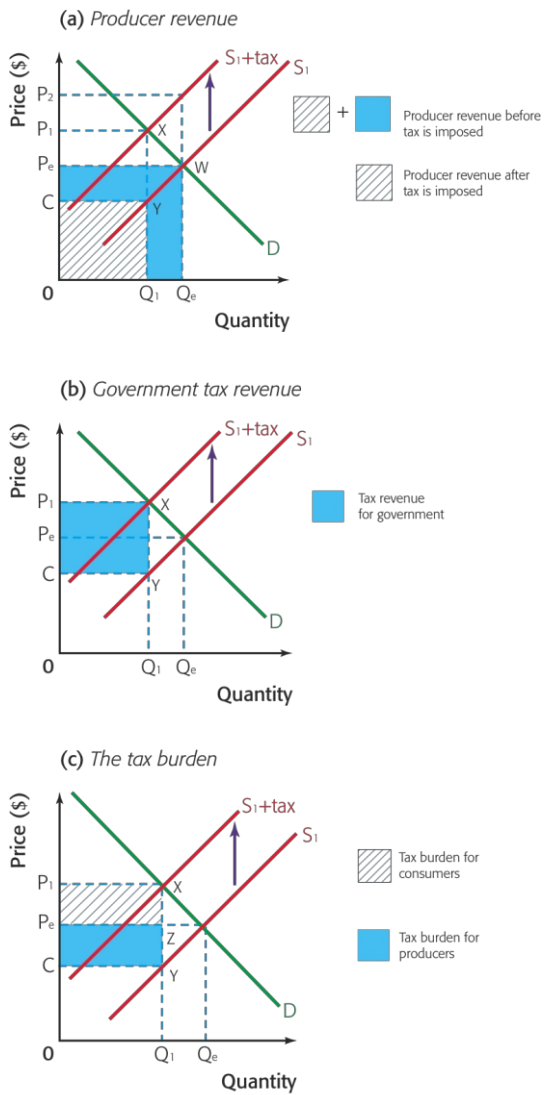


Figure 5.2 The imposition of a specific tax on a product

Indirect taxes, subsidies, and price controls

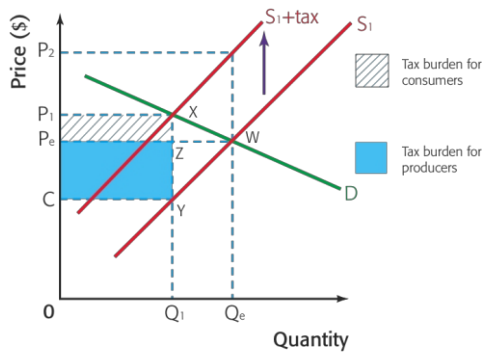


Figure 5.3 The imposition of a specific tax on a product where PED is greater than PES

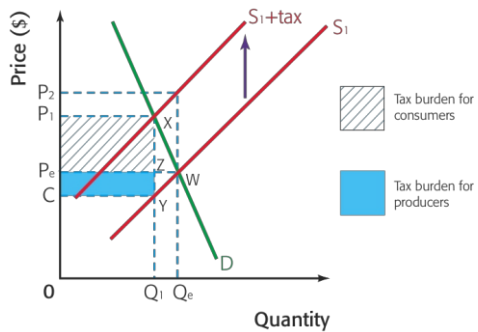
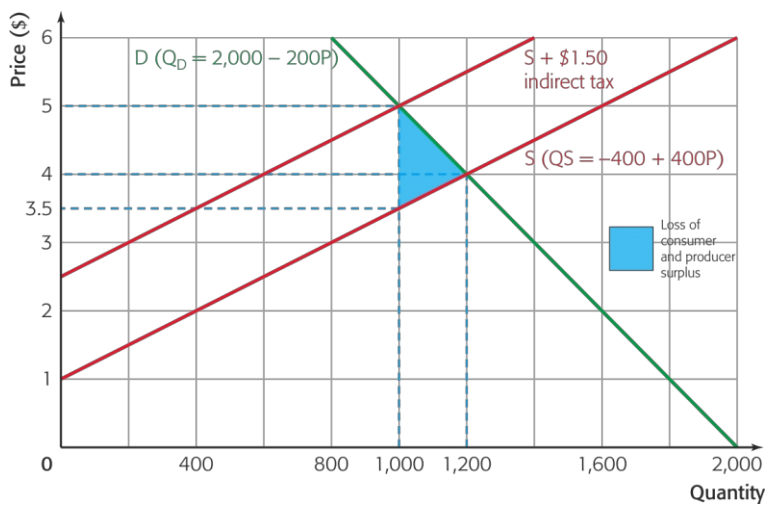


Figure 5.4 The imposition of a specific tax on a product where PED is less than PES



Indirect taxes, subsidies, and price controls



Figure 5.5 The effect on a supply curve of a specific subsidy

Indirect taxes, subsidies, and price controls

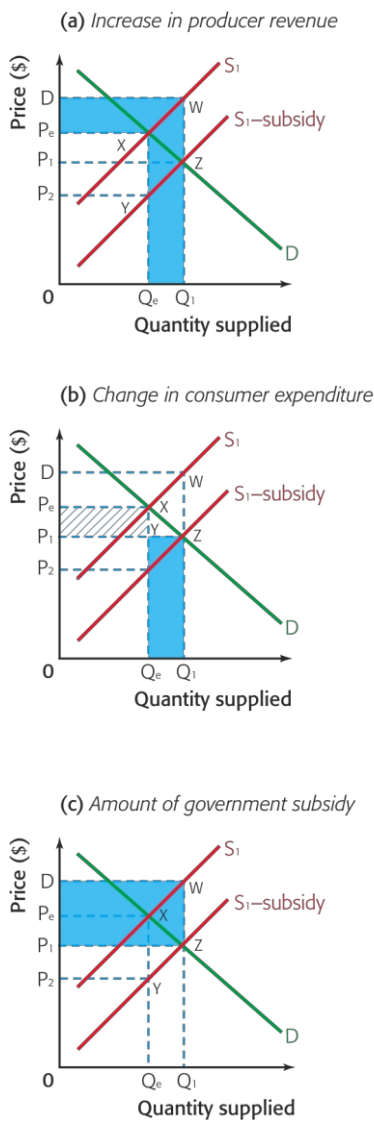


Figure 5.6 The granting of a specific subsidy on a product

Indirect taxes, subsidies, and price controls

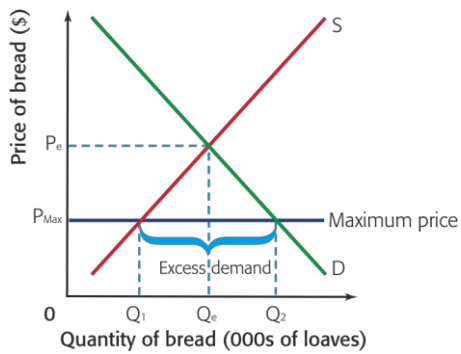


Figure 5.7 The market for bread

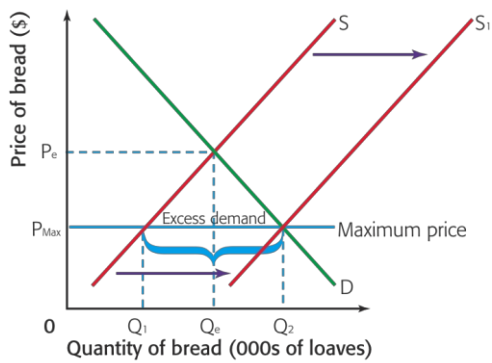
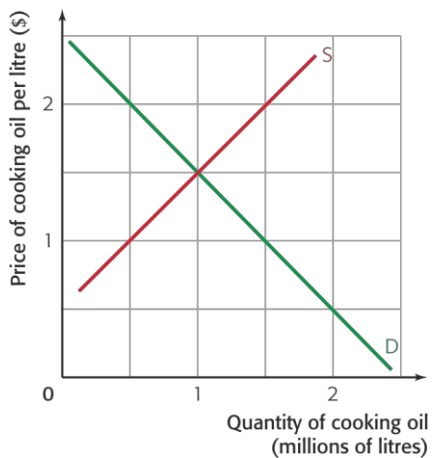


Figure 5.8 Government action to solve the problem of excess demand



Indirect taxes, subsidies, and price controls

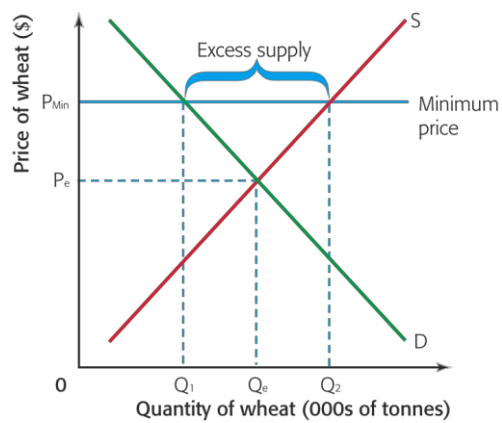


Figure 5.9 A minimum price in the market for wheat

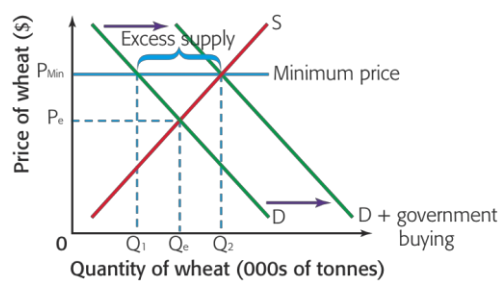


Figure 5.10 Government action to solve the problem of excess supply

Indirect taxes, subsidies, and price controls

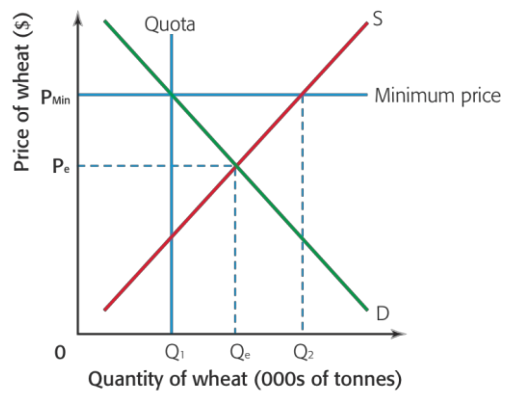
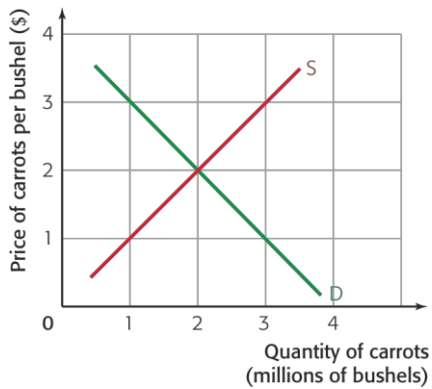


Figure 5.11 A quota to maintain a minimum price



Costs, revenues, and profit

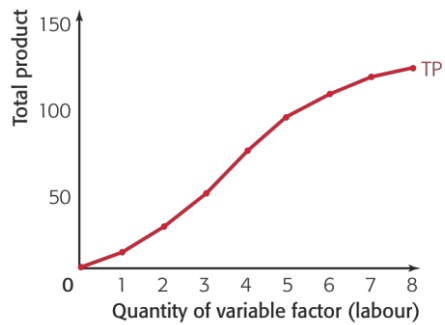


Figure 6.1 The total product curve

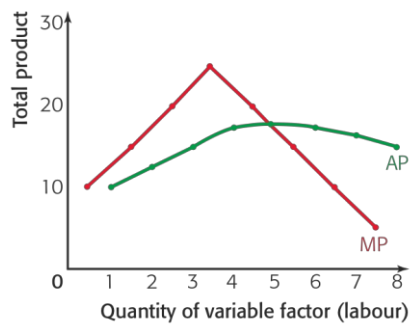


Figure 6.2 Average and marginal product curves

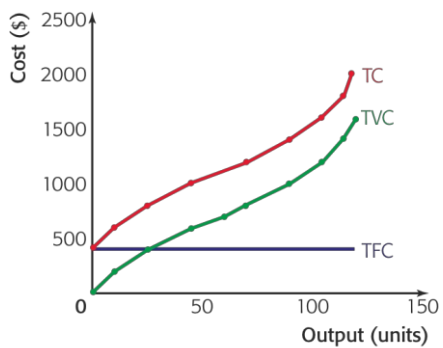


Figure 6.3 Total cost, total variable cost, and total fixed cost

Costs, revenues, and profit

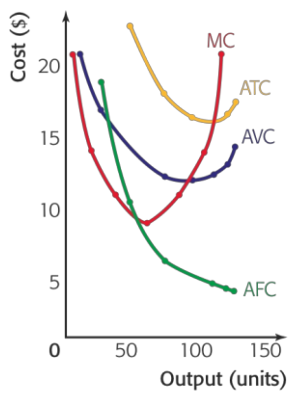


Figure 6.4 Short-run AFC, AVC, ATC, and MC curves

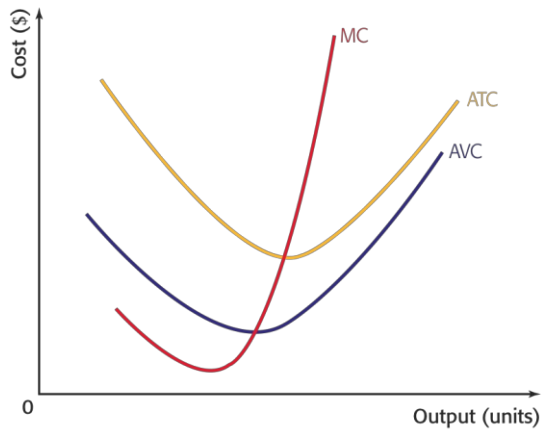


Figure 6.5 A general diagram showing short-run ATC, AVC, and MC

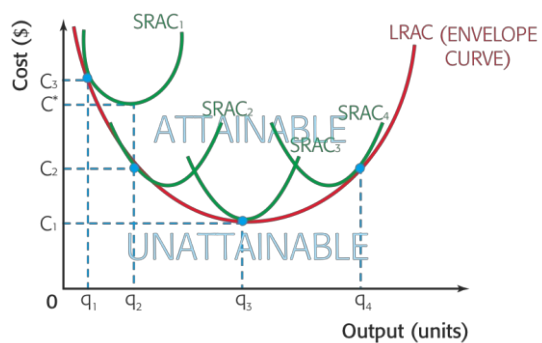


Figure 6.6 The LRAC curve and short run average cost curves

Costs, revenues, and profit

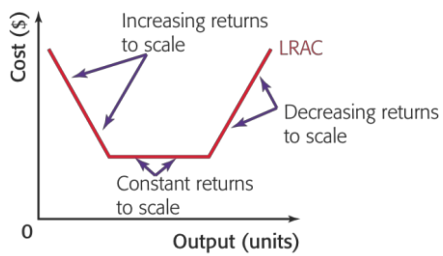


Figure 6.7 Increasing, constant, and decreasing returns to scale

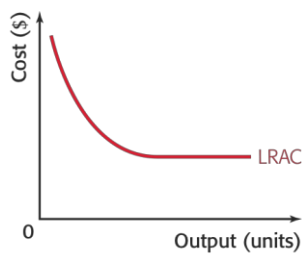


Figure 6.8 A long-run average cost curve in reality

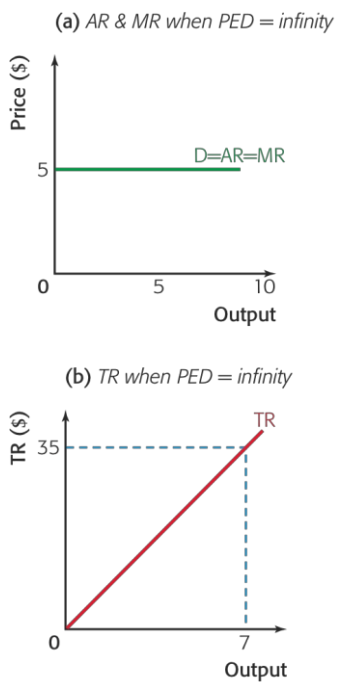


Figure 6.9 Curves for $PED = \text{infinity}$

Costs, revenues, and profit

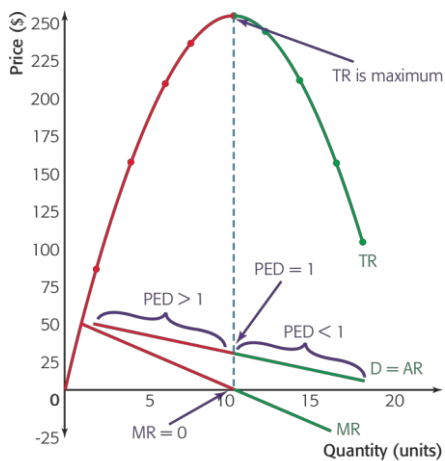


Figure 6.10 The relationship between D, AR, MR, TR, and PED for a normal demand curve

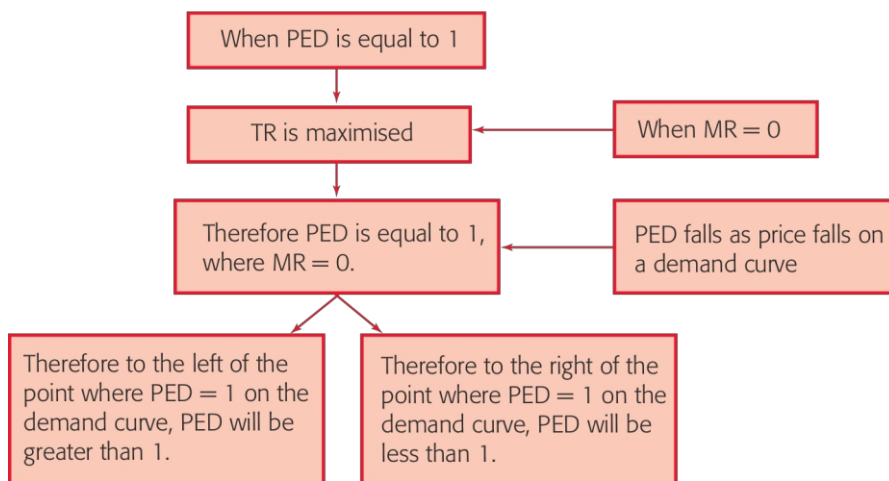


Figure 6.11 A logic tree explaining the varying values of PED on a demand curve

Costs, revenues, and profit

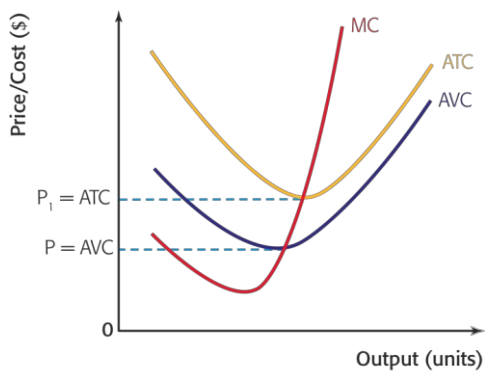


Figure 6.12 A general diagram showing short run ATC, AVC, and MC

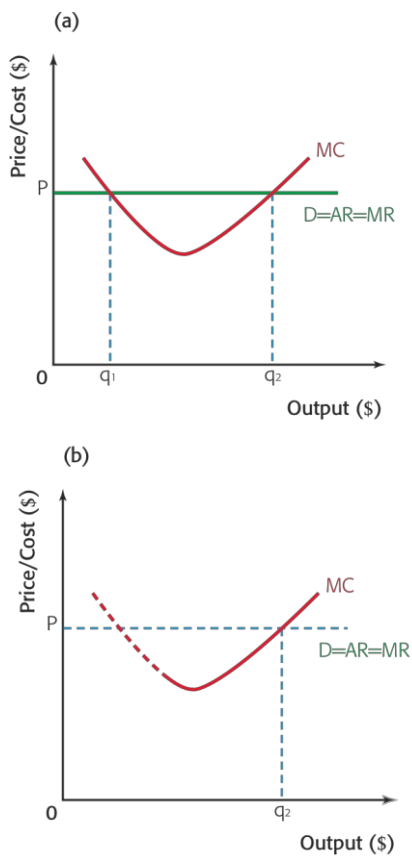


Figure 6.13 Revenue and costs for a firm with a perfectly elastic demand curve

Costs, revenues, and profit

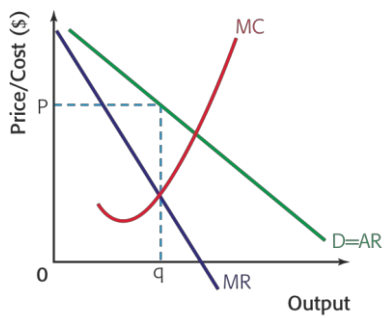


Figure 6.14 The profit-maximising level of output for a normal demand curve

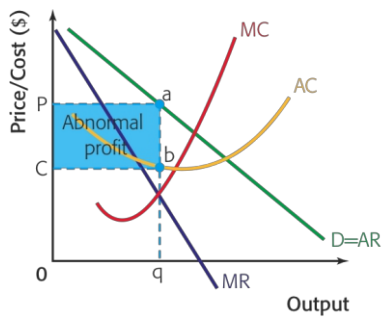


Figure 6.15 Showing an area of profit using the AC curve

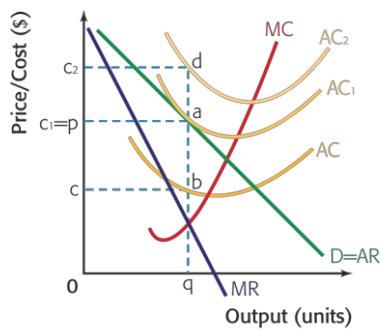
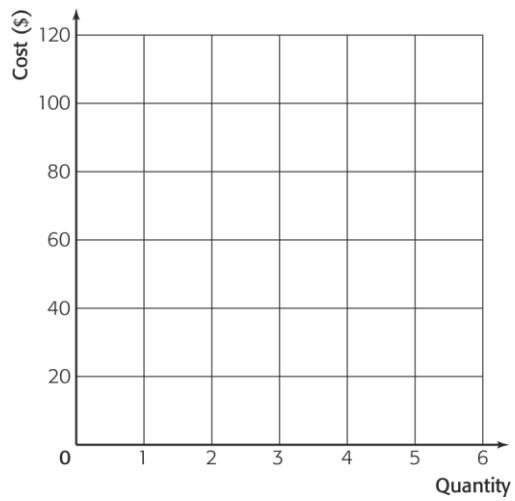
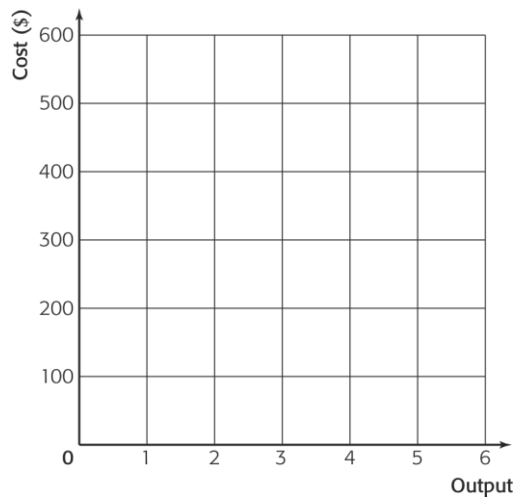


Figure 6.16 Using AC to show different profit and loss situations

Costs, revenues, and profit



Perfect competition

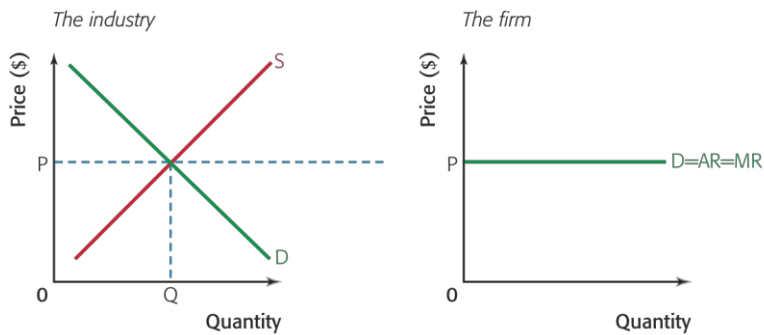


Figure 7.1 The demand curves for the industry and the firm in perfect competition

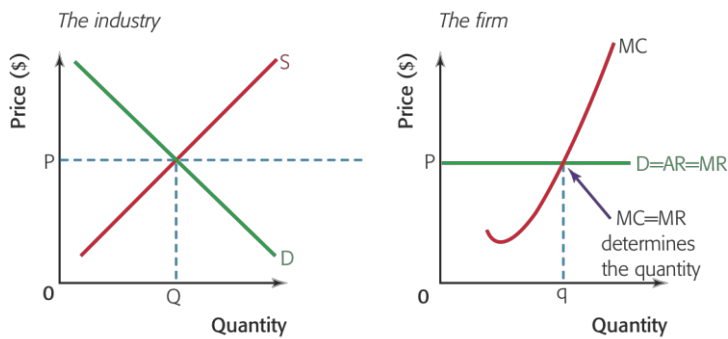


Figure 7.2 The profit-maximizing level of output in perfect competition

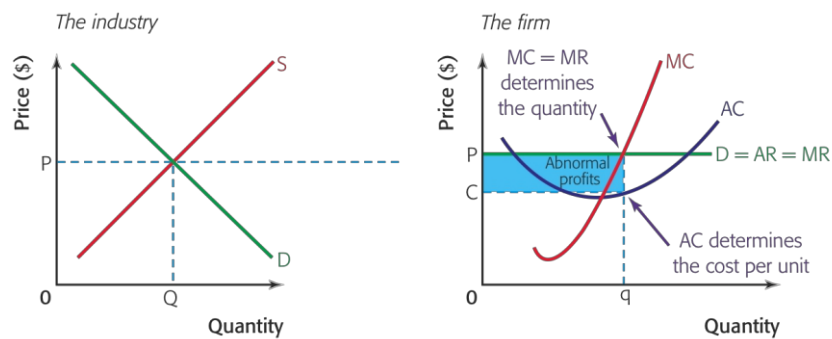


Figure 7.3 Short-run abnormal profits in perfect competition

Perfect competition

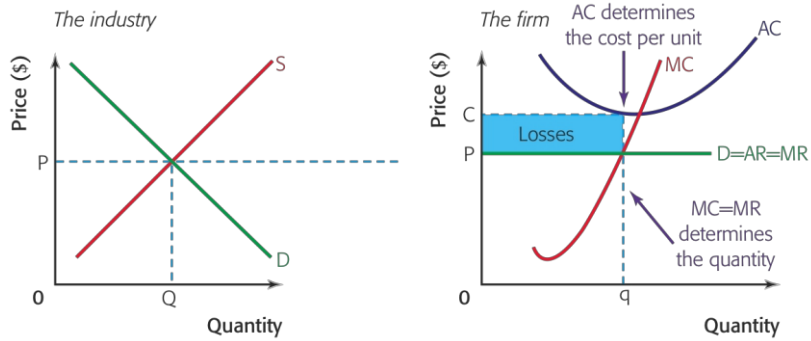


Figure 7.4 Short-run losses in perfect competition

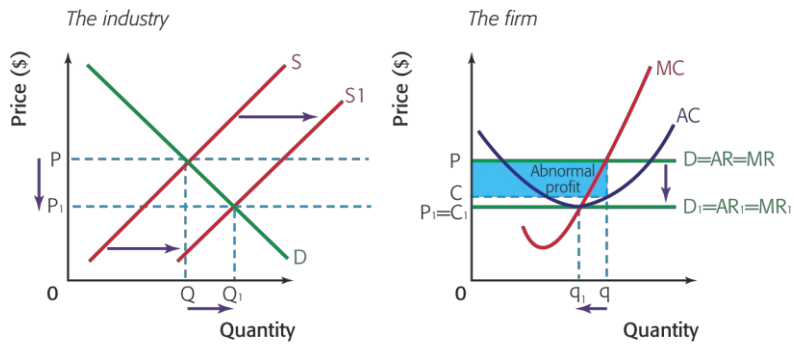


Figure 7.5 The movement from short-run abnormal profit to long-run normal profit

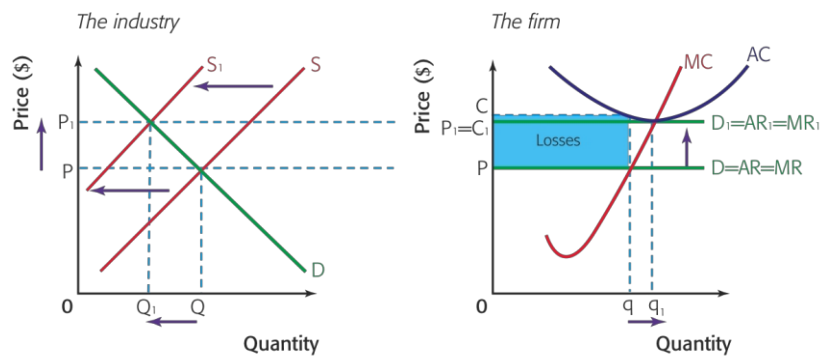


Figure 7.6 The movement from short-run losses to long-run normal profit

Perfect competition

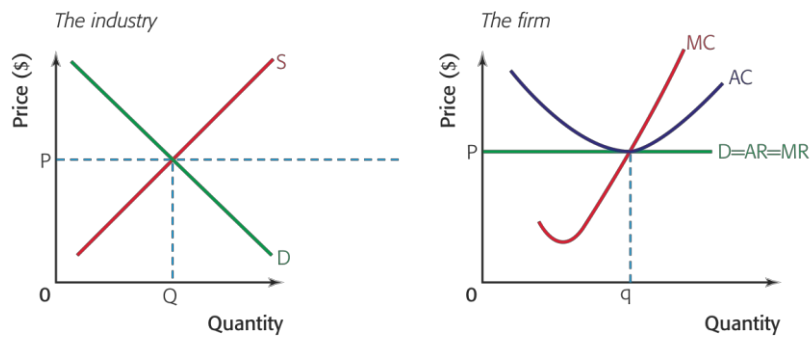


Figure 7.7 Long-run equilibrium in perfect competition

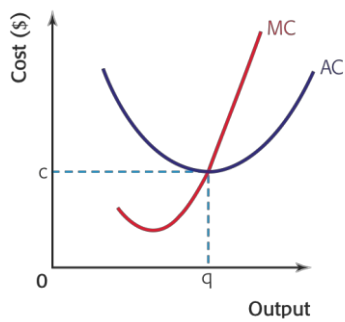


Figure 7.8 Productive efficiency

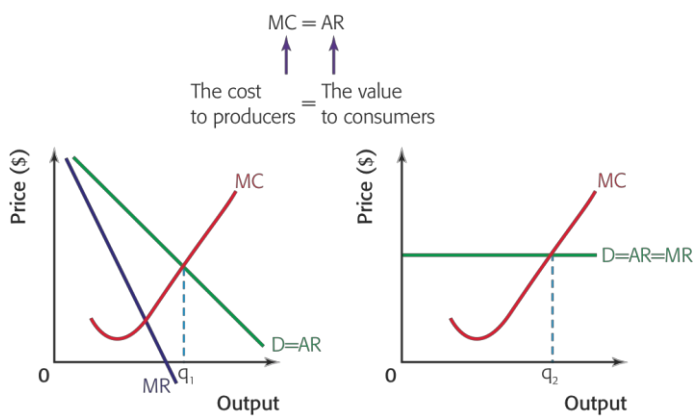


Figure 7.9 Allocative efficiency

Perfect competition

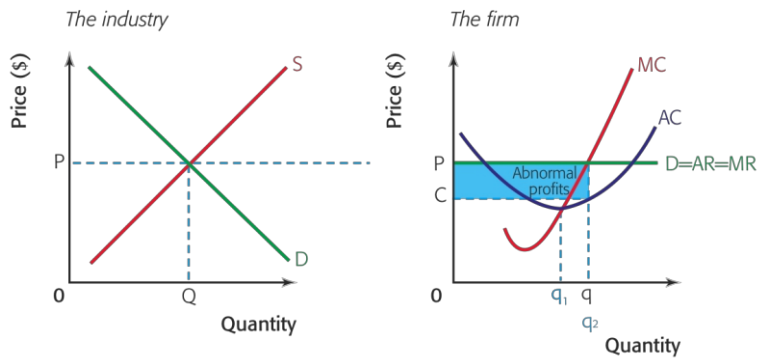


Figure 7.10 Productive and allocative efficiency with short-run profits in perfect competition

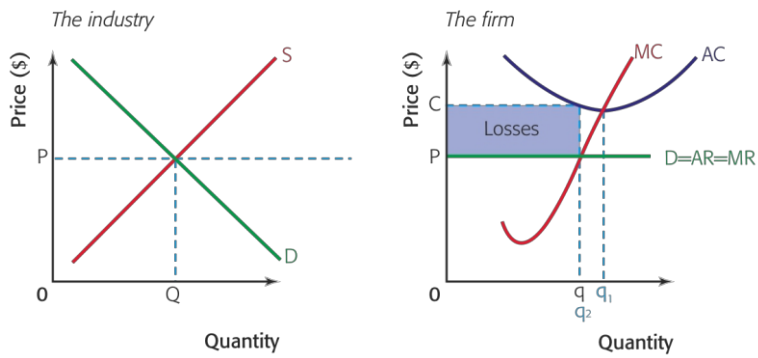


Figure 7.11 Productive and allocative efficiency with short-run losses in perfect competition

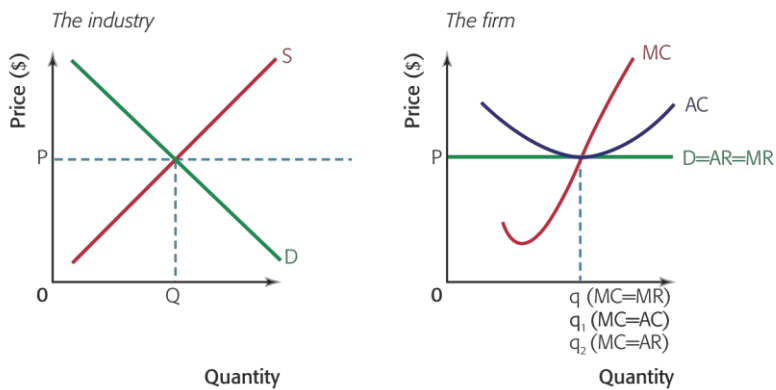


Figure 7.12 Productive and allocative efficiency in the long run in perfect competition

Monopoly

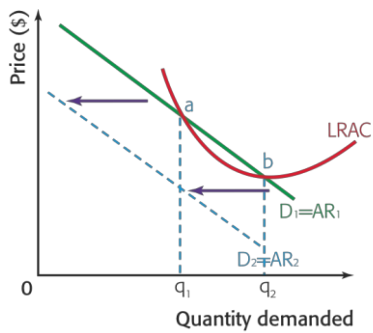


Figure 8.1 A natural monopoly

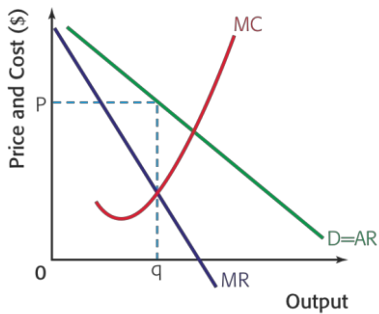


Figure 8.2 The demand curve facing a monopolist

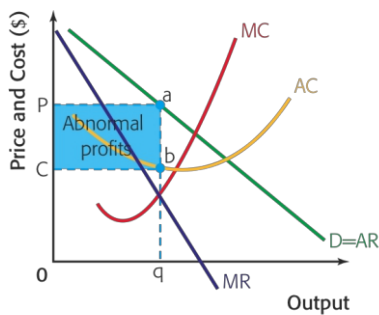


Figure 8.3 Abnormal profits in the long run in monopoly

Monopoly

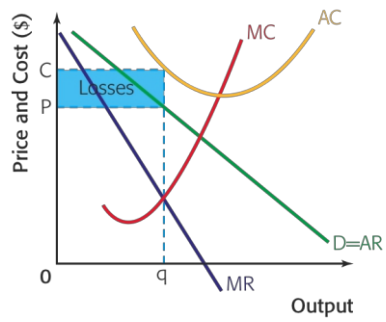


Figure 8.4 A monopolist making losses in the long run

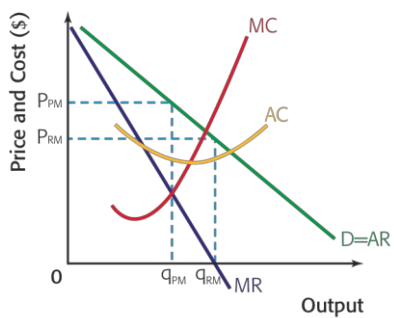


Figure 8.5 Revenue maximizing as opposed to profit maximizing in monopoly

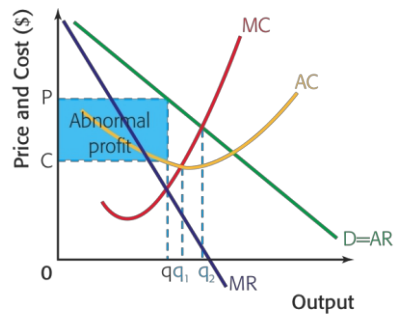


Figure 8.6 Productive and allocative efficiency in monopoly

Monopoly

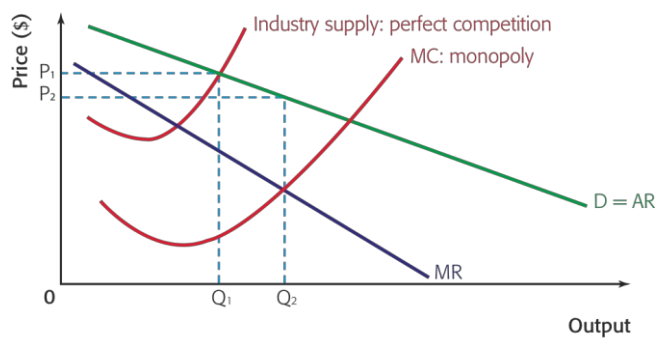


Figure 8.7 Economies of scale in monopoly

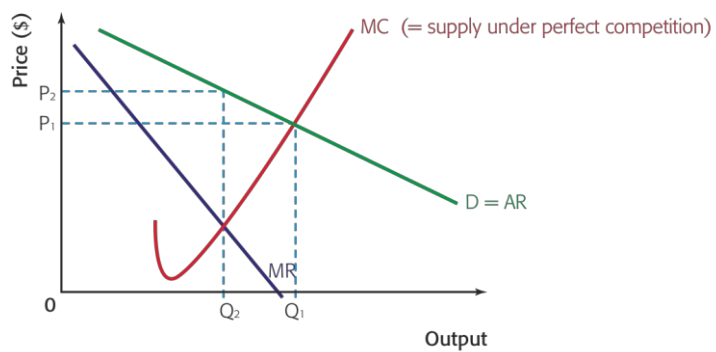


Figure 8.8 Monopoly versus perfect competition without economies of scale

Monopolistic competition

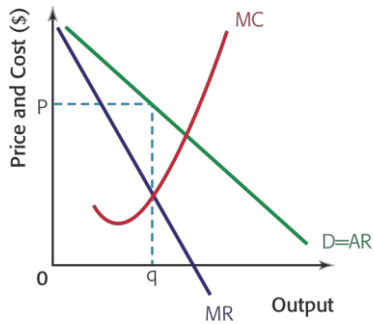


Figure 9.1 The demand curve for a firm in monopolistic competition

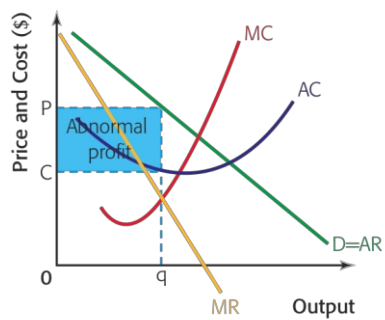


Figure 9.2 Short-run abnormal profits in monopolistic competition

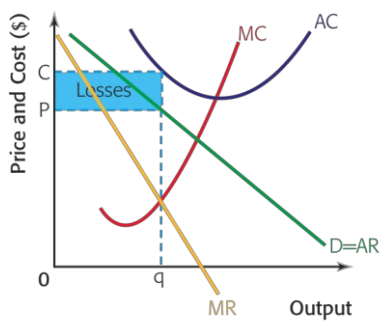


Figure 9.3 Short-run losses in monopolistic competition

Monopolistic competition

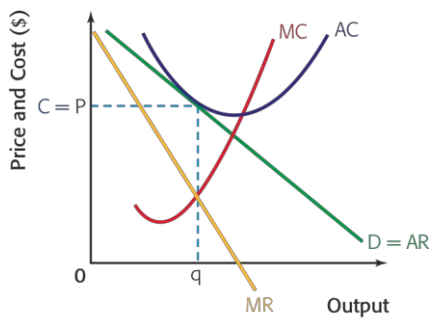


Figure 9.4 Long-run equilibrium in monopolistic competition

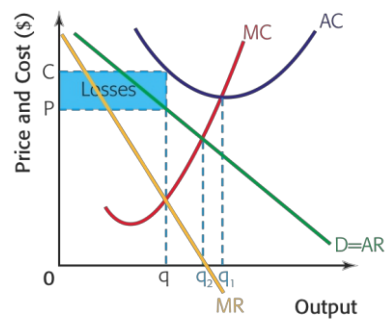
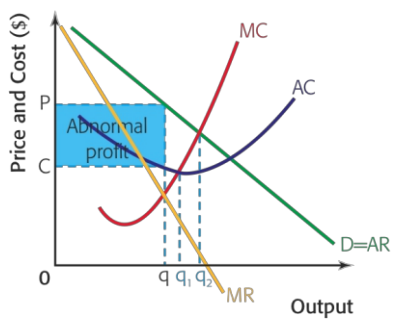


Figure 9.5 Productive and allocative efficiency in the short run in monopolistic competition

Monopolistic competition

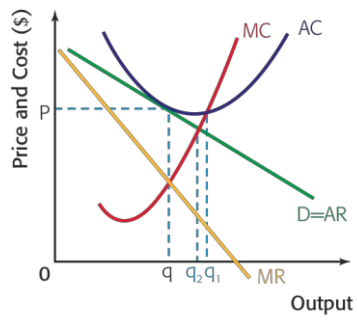


Figure 9.6 Productive and allocative efficiency in the long run in monopolistic competition

Oligopoly

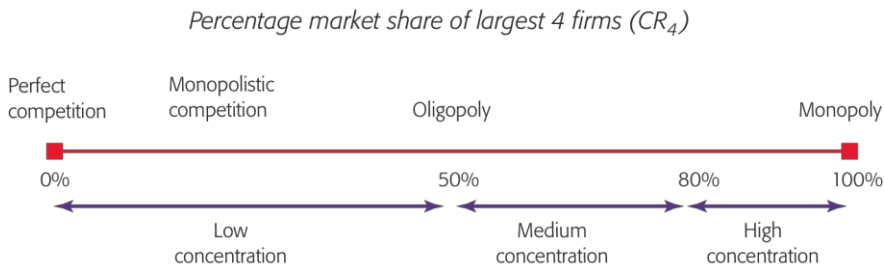


Figure 10.1 CR_4 ratios in different market structures

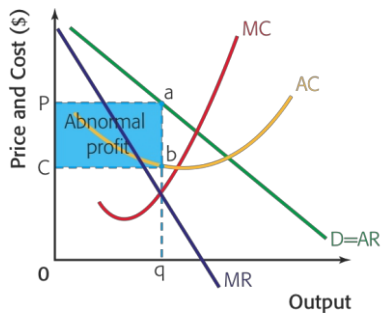


Figure 10.2 Oligopolists acting as a monopolist

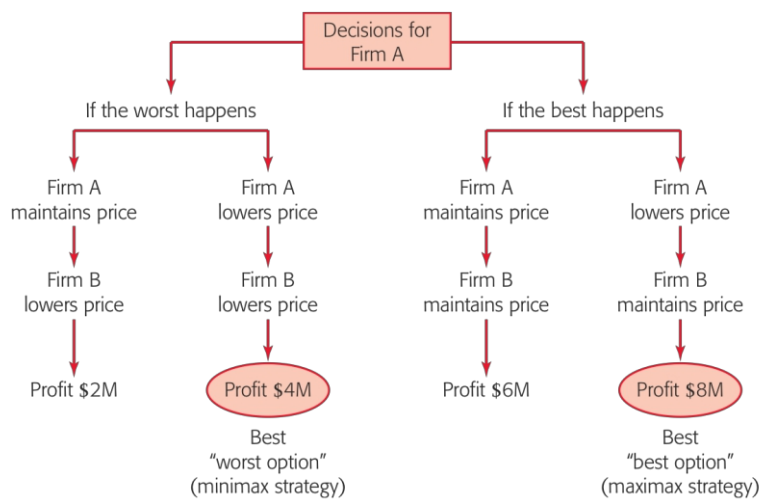


Figure 10.3 Game theory outcomes for Firms A and B

Oligopoly

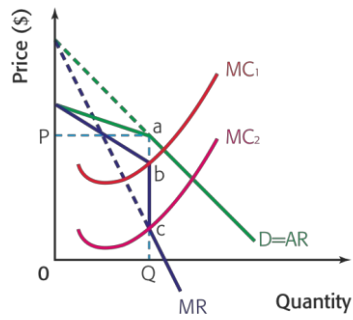


Figure 10.4 The kinked demand curve

Price discrimination

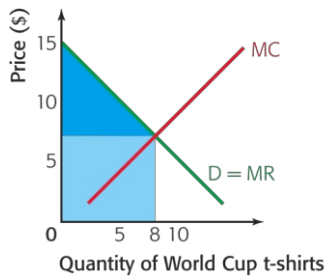


Figure 11.1 First-degree price discrimination

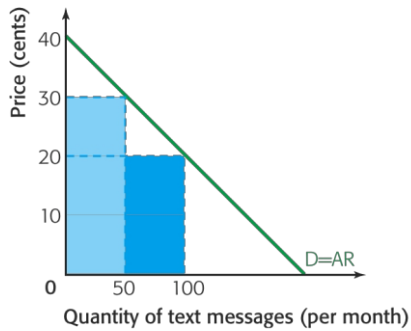


Figure 11.2 Second-degree price discrimination

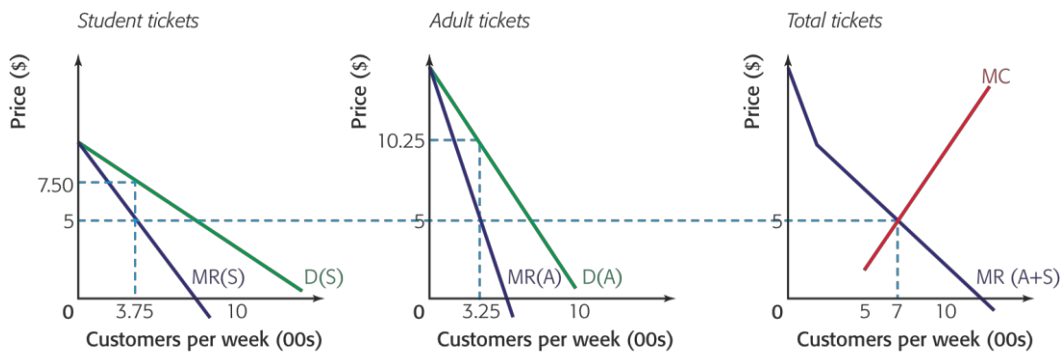


Figure 11.3 Third degree price discrimination

Market failure

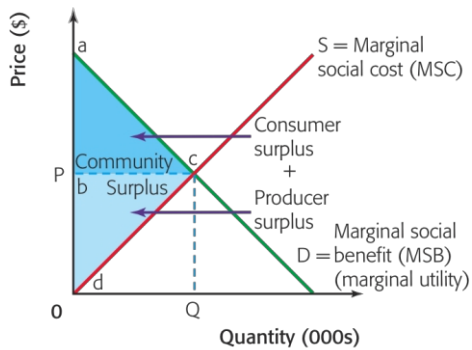


Figure 12.1 Community surplus

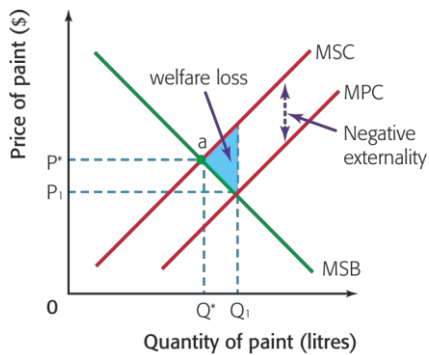


Figure 12.2 A negative externality of production

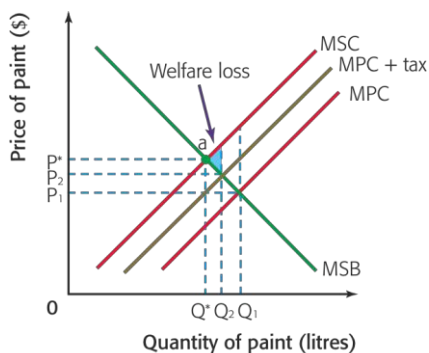


Figure 12.3 Taxing a negative externality of production

Market failure

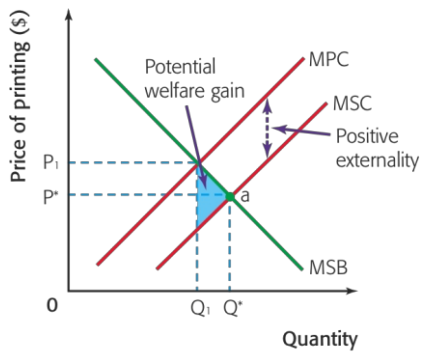


Figure 12.4 A positive externality of production

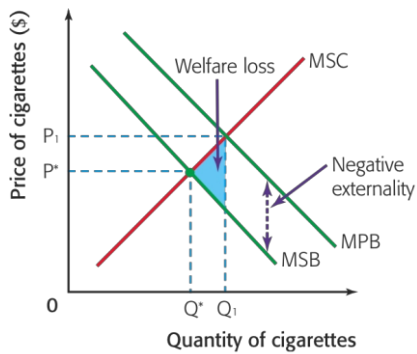


Figure 12.5 A negative externality of consumption

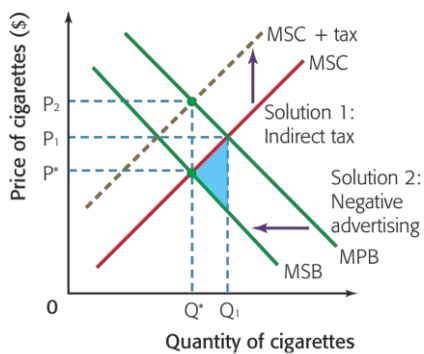


Figure 12.6 Measures to reduce negative externalities of consumption

Market failure

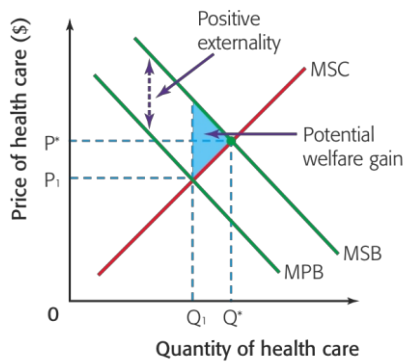


Figure 12.7 A positive externality of consumption

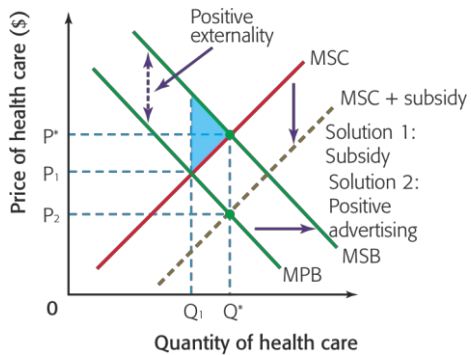


Figure 12.8 Measures to promote positive externalities of consumption

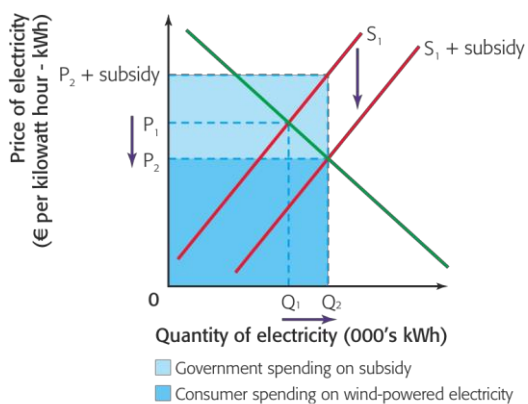


Figure 12.9 Production of electricity using wind power with turbines on a wind farm

Market failure

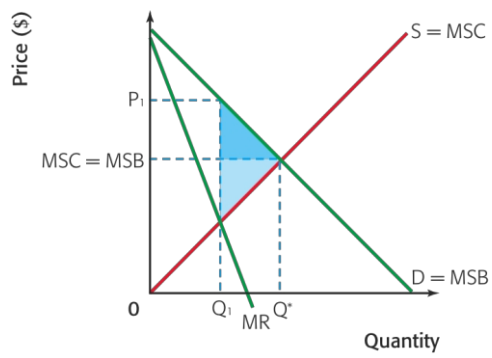


Figure 12.10 Imperfect competition

The level of overall economic activity

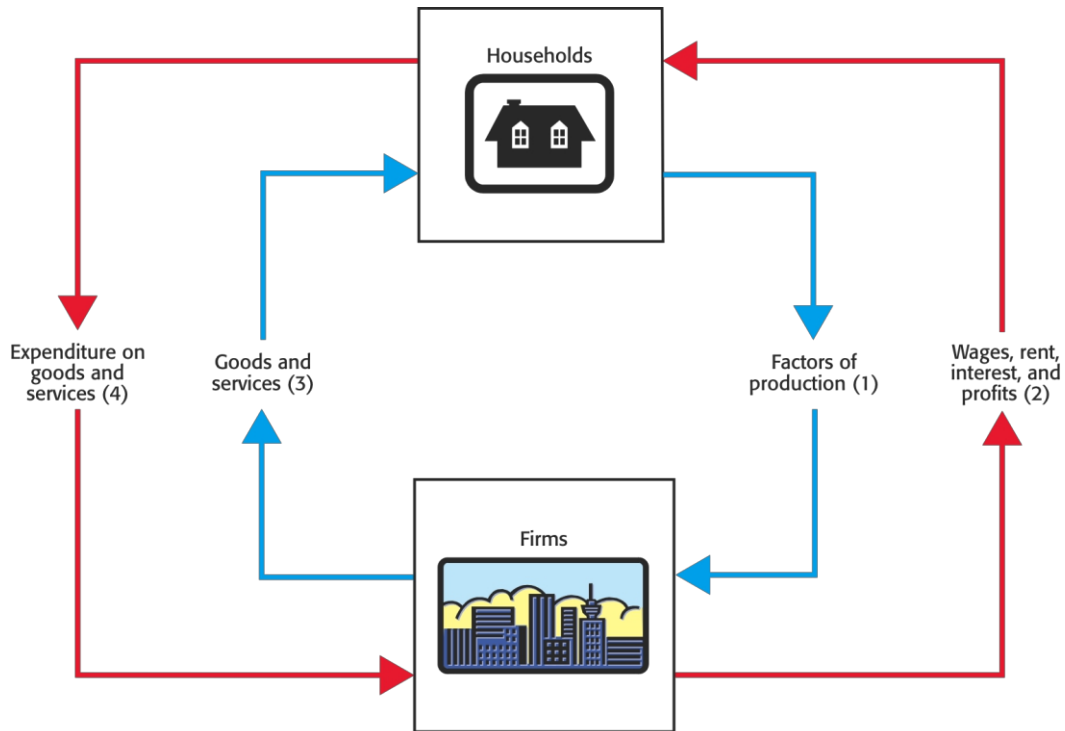


Figure 13.1 Two-sector circular flow of income model

The level of overall economic activity

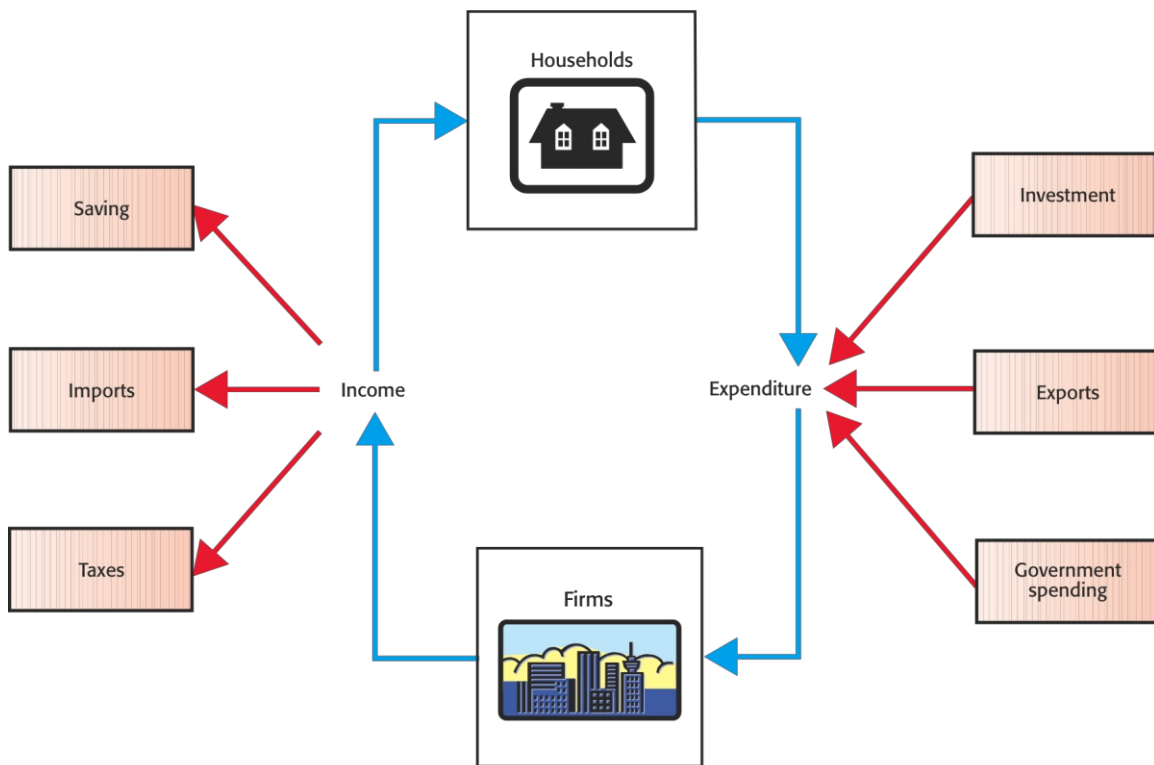


Figure 13.2 Four-sector circular flow with leakages and injections

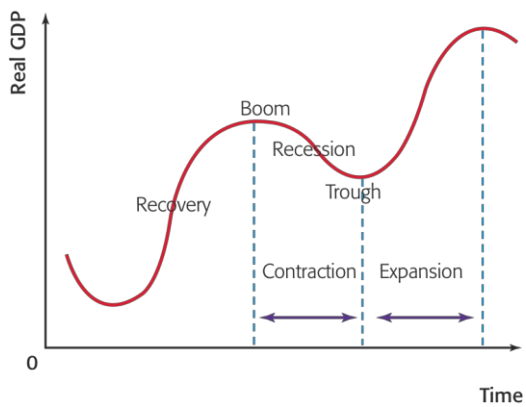


Figure 13.3 The standard business cycle

The level of overall economic activity

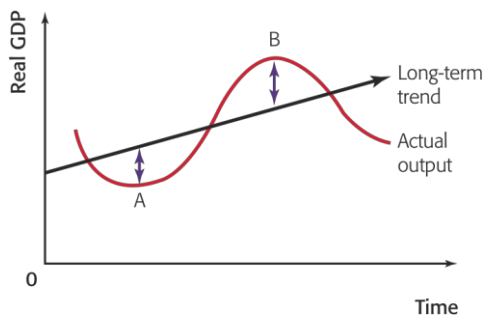
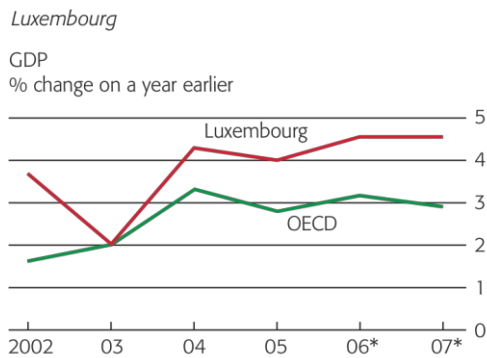


Figure 13.4 Long-term trend and output gaps



Source: *The Economist*, 15–21 July 2006

Aggregate demand

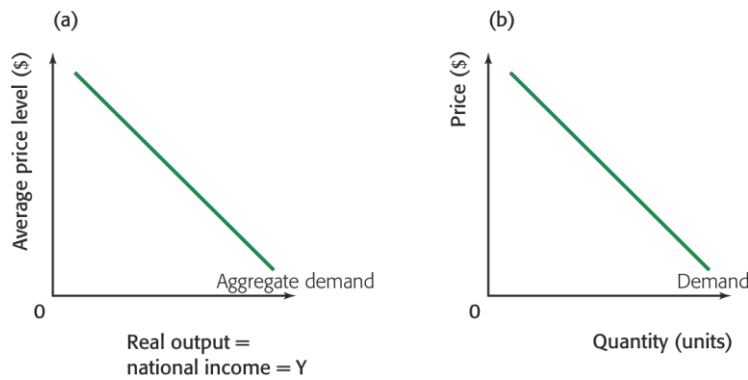


Figure 14.1 (a) Macroeconomic aggregate demand curve; (b) microeconomic demand curve

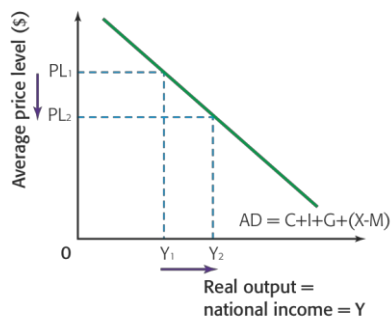


Figure 14.2 The aggregate demand curve

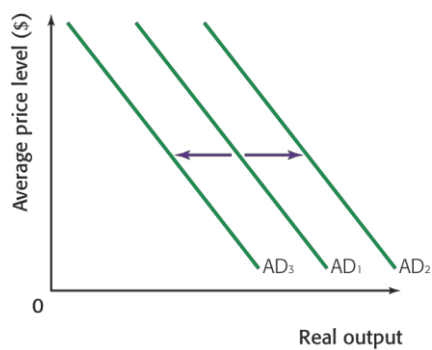


Figure 14.3 Shifts in aggregate demand

Aggregate demand

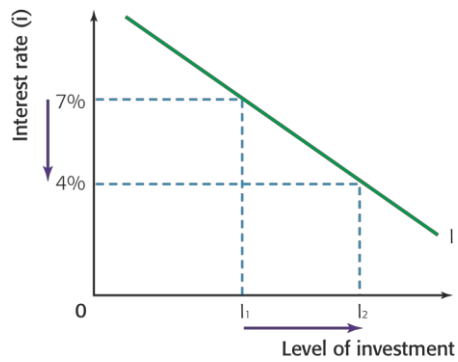
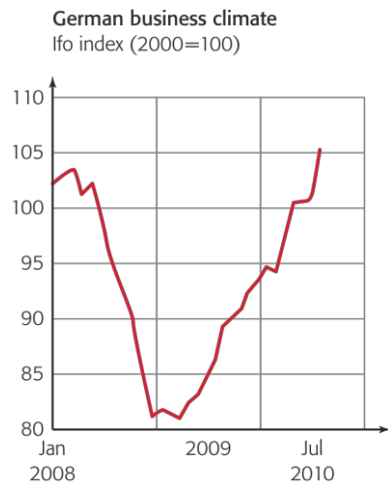


Figure 14.4 The relationship between investment and the interest rate



Aggregate supply

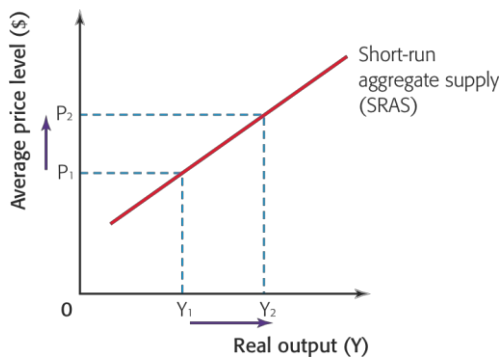


Figure 15.1 The SRAS curve

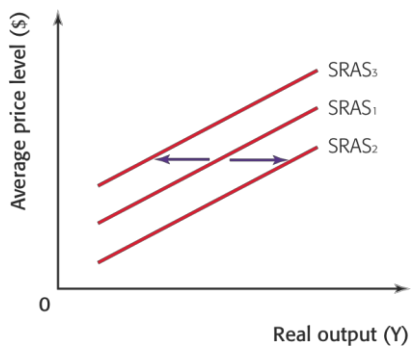


Figure 15.2 Shifts in the SRAS curve

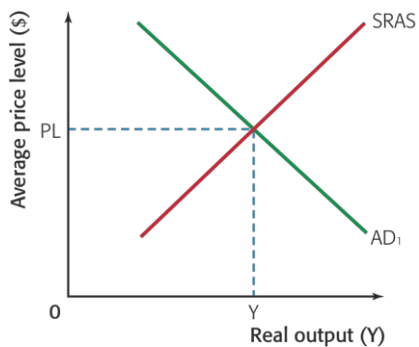


Figure 15.3 Short-run macroeconomic equilibrium

Aggregate supply

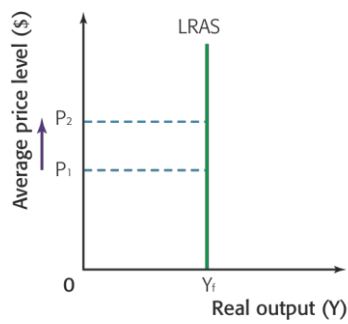


Figure 15.4 New classical LRAS curve

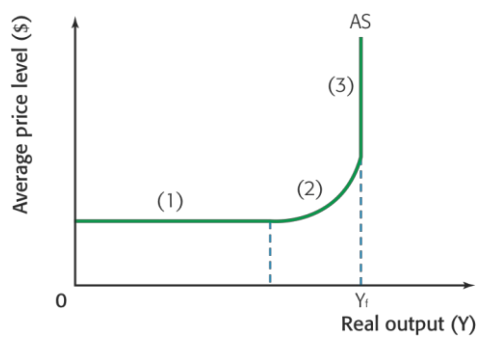


Figure 15.5 Keynesian LRAS curve

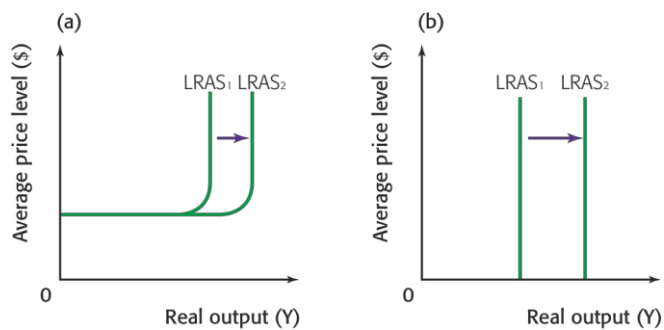


Figure 15.6 A shift in the LRAS curve (a) from the Keynesian perspective and (b) from the new classical perspective

Aggregate supply

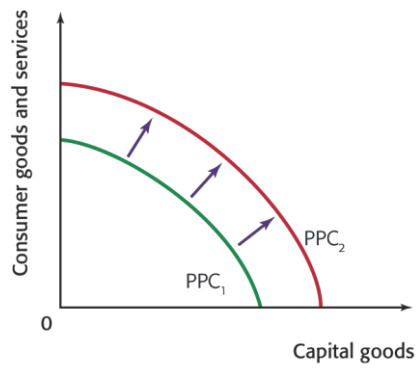


Figure 15.7 An increase in productive potential equivalent to an increase in the LRAS

Macroeconomic equilibrium

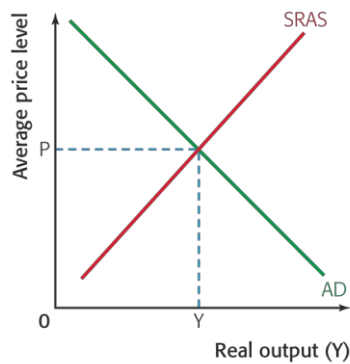


Figure 16.1 Short-run equilibrium output

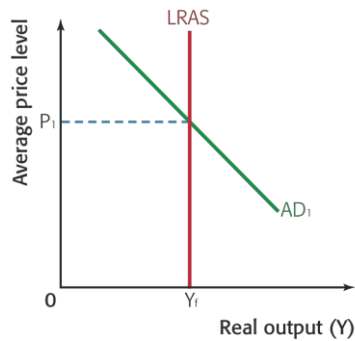


Figure 16.2 The new classical perspective of long-run equilibrium

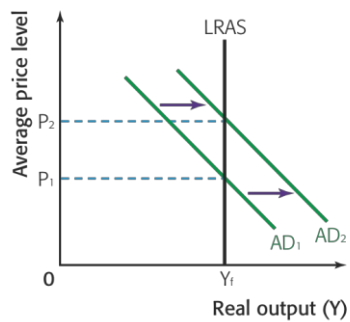


Figure 16.3 The new classical perspective of the impact of an increase in AD in the long run

Macroeconomic equilibrium

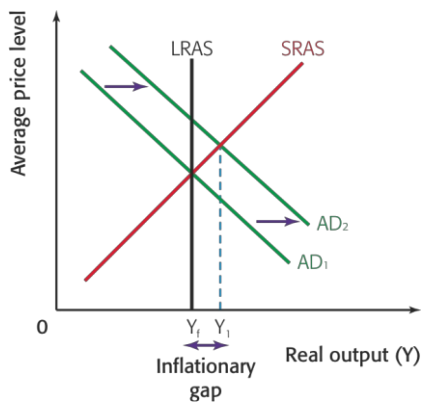


Figure 16.4 An inflationary gap in the new classical model

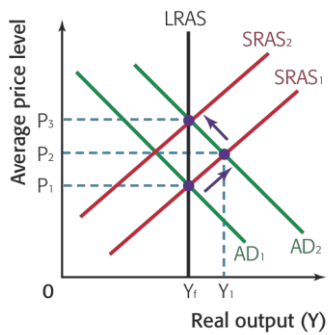


Figure 16.5 The new classical perspective of the impact of an increase in AD in the short run and in the long run

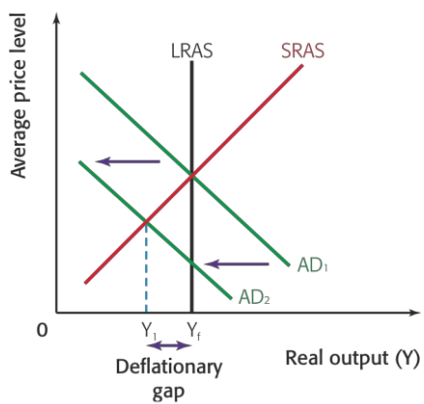


Figure 16.6 A deflationary gap in the new classical model

Macroeconomic equilibrium

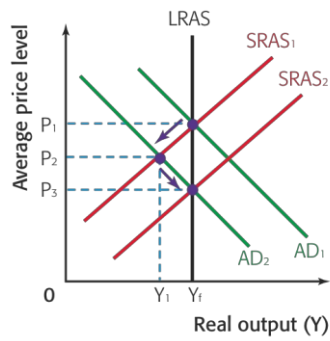


Figure 16.7 The new classical perspective of the impact of a decrease in AD in the short run and in the long run

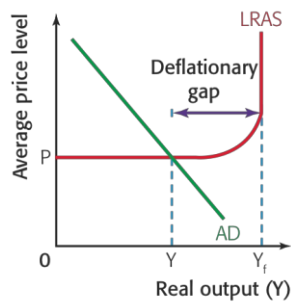


Figure 16.8 The Keynesian perspective of long-run equilibrium output below the full employment level of output

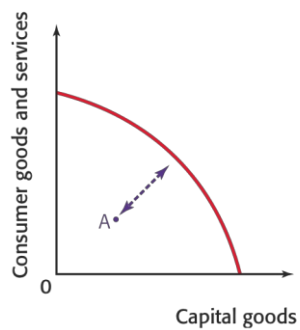


Figure 16.9 Output gap illustrating the difference between an economy's actual output and its potential output

Macroeconomic equilibrium

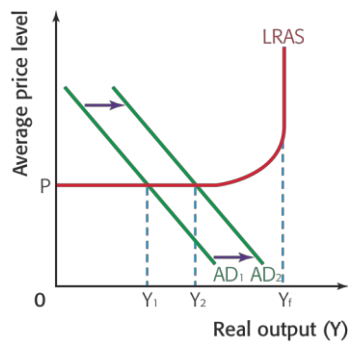


Figure 16.10 The Keynesian perspective of the impact of an increase in AD when the economy is operating below full employment

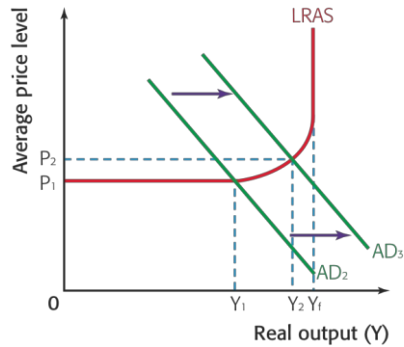


Figure 16.11 The Keynesian perspective of the impact of an increase in AD when the economy is close to full employment

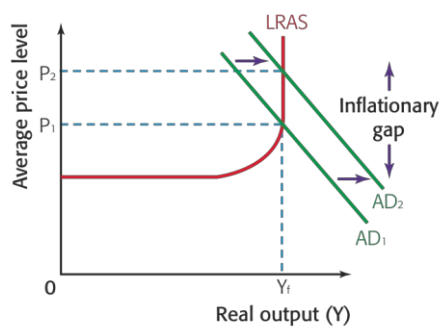


Figure 16.12 The Keynesian perspective of the impact of an increase in AD when the economy is at full employment

Macroeconomic equilibrium

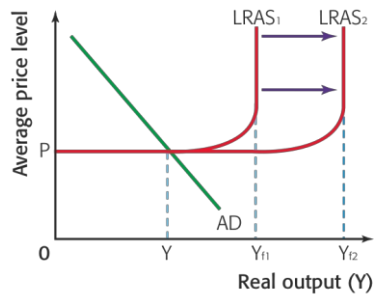


Figure 16.13 The Keynesian perspective of the impact of an increase in the LRAS when the economy is operating below full employment

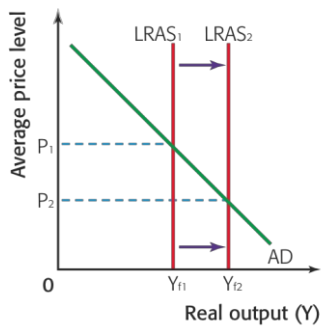


Figure 16.14 The new classical perspective of the impact of an increase in the LRAS

Low unemployment

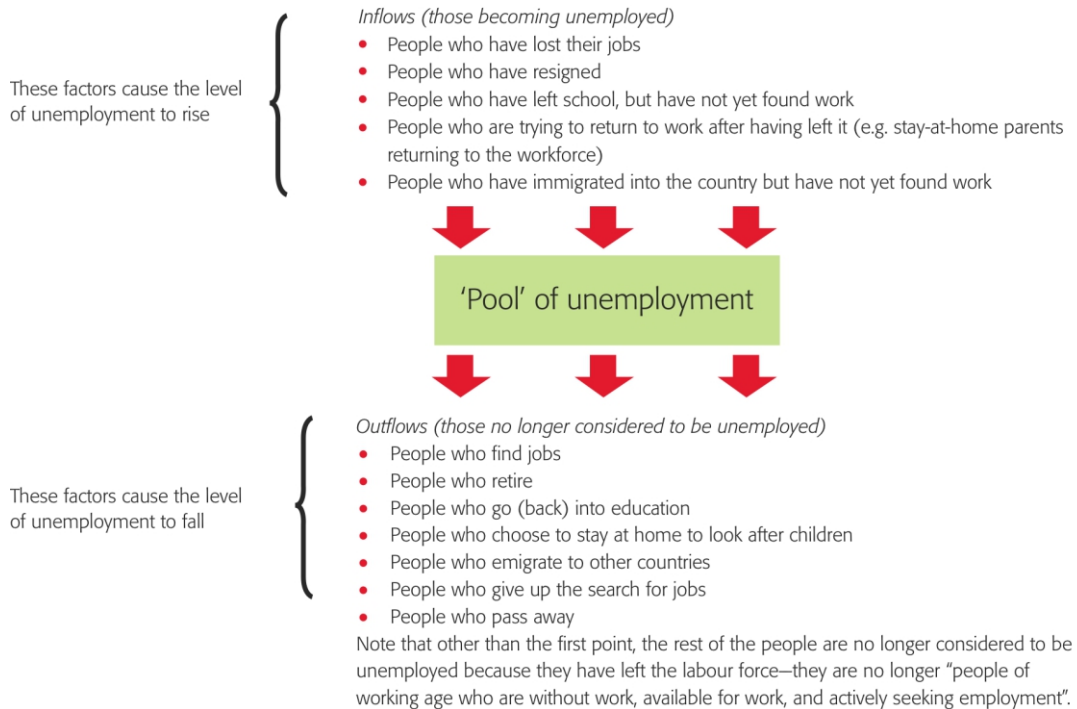


Figure 17.1 Inflows and outflows from the “pool” of unemployment

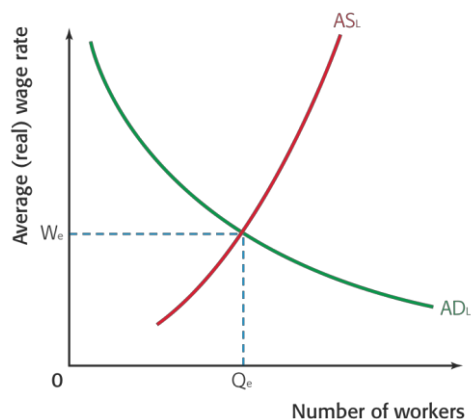


Figure 17.2 Equilibrium in the labour market

Low unemployment

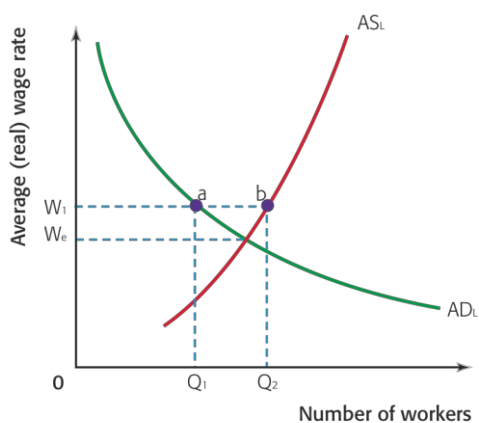


Figure 17.3 Real-wage unemployment

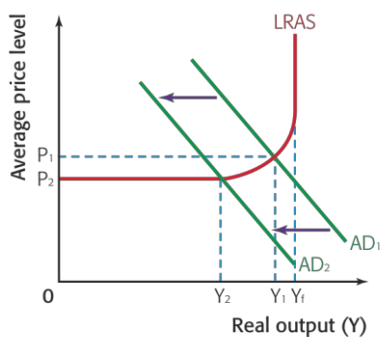


Figure 17.4 (a) A decrease in AD

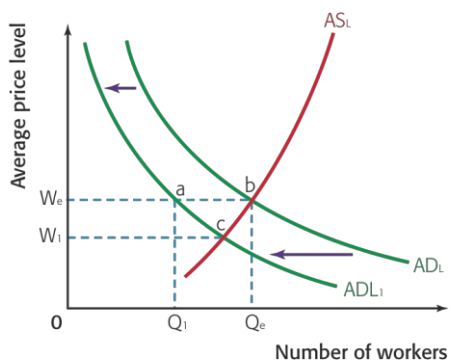


Figure 17.4 (b) Demand-deficient unemployment

Low unemployment

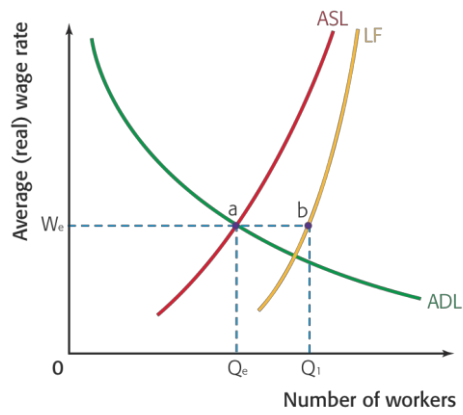


Figure 17.5 Equilibrium unemployment

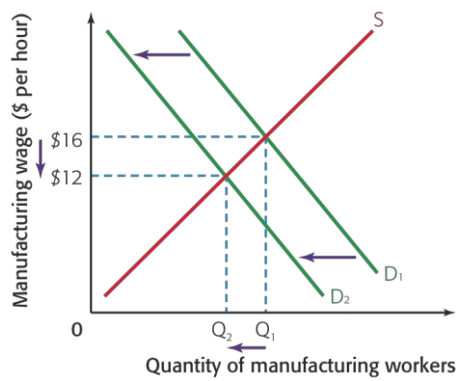


Figure 17.6 A fall in employment
(structural unemployment)

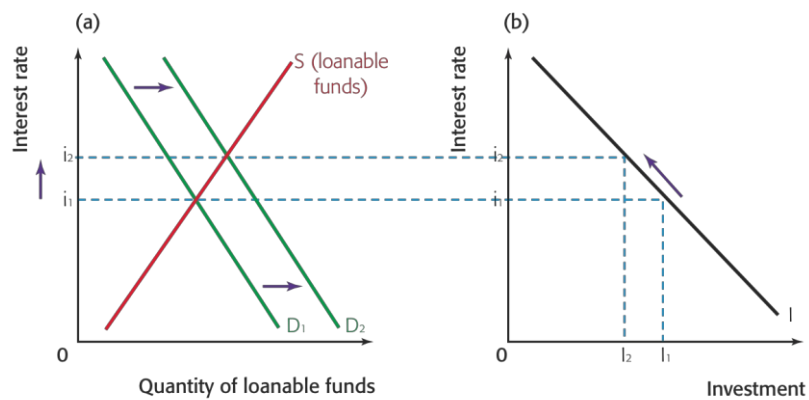
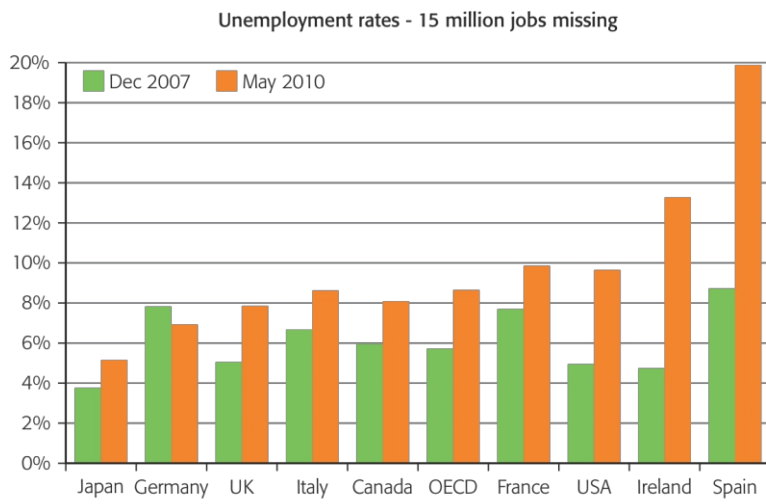


Figure 17.7 Crowding out

Low unemployment



A low and stable rate of inflation

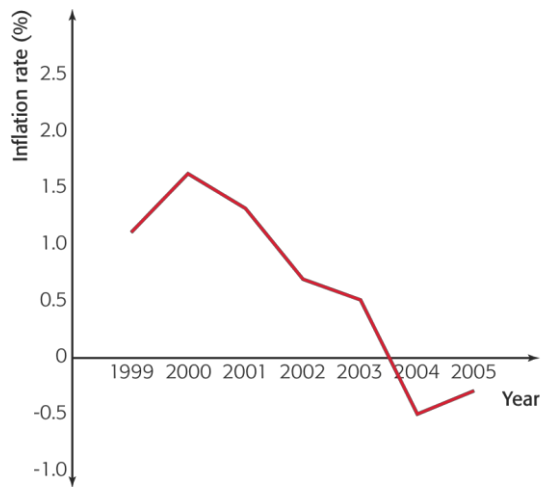


Figure 18.1 Changing rates of inflation and deflation

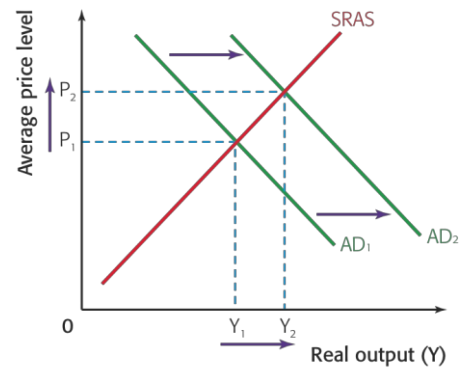
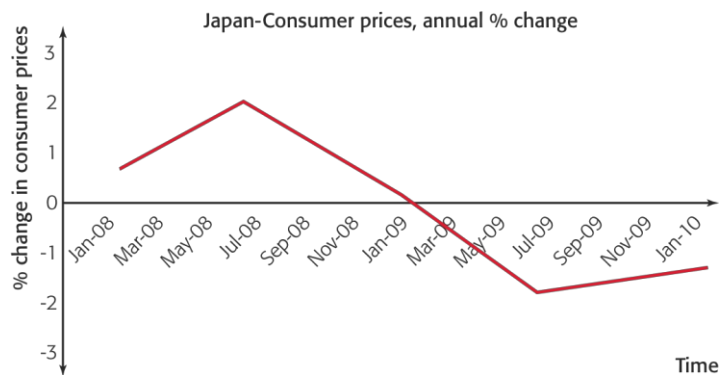


Figure 18.2 Demand-pull inflation

A low and stable rate of inflation

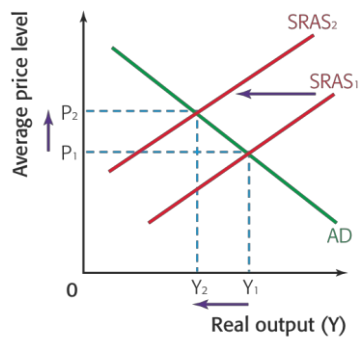


Figure 18.3 Cost-push inflation

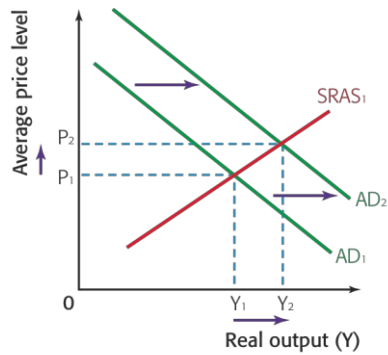


Figure 18.4 Demand-pull inflation

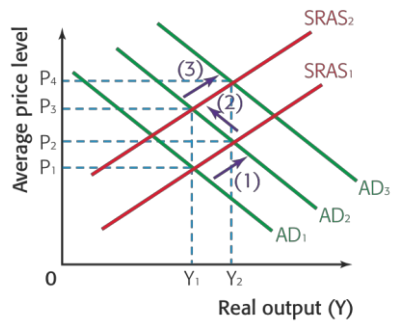


Figure 18.5 An inflationary spiral

A low and stable rate of inflation

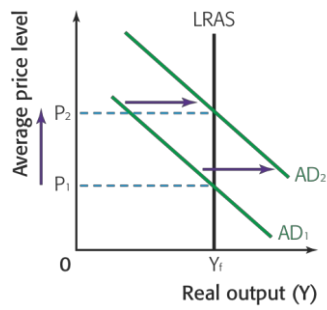


Figure 18.6 Inflation due to excess monetary growth

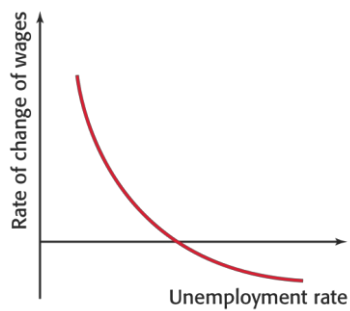


Figure 18.7 The original Phillips curve

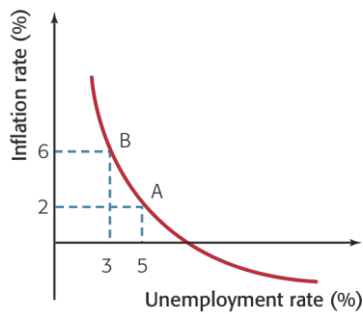


Figure 18.8 The Phillips curve as it is usually drawn

A low and stable rate of inflation

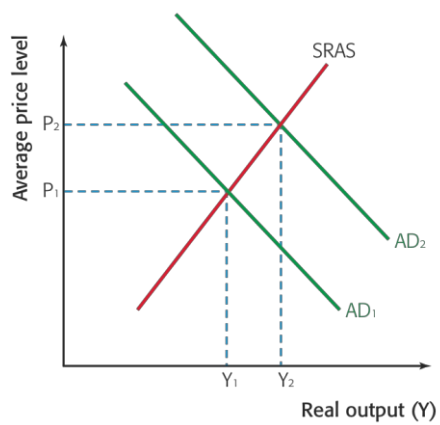


Figure 18.9 Phillips curve relationship through AD/AS analysis

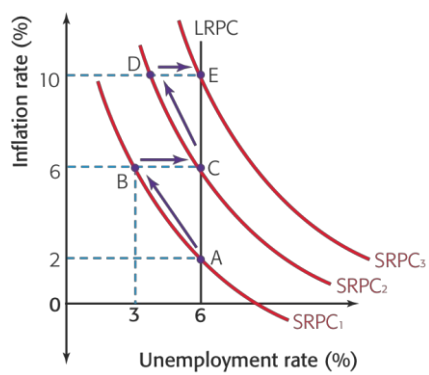


Figure 18.10 The long-run Phillips curve

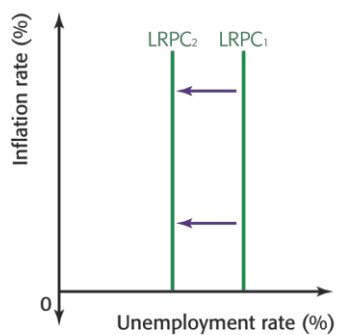


Figure 18.11 Supply-side policies can reduce the NRU

Economic growth

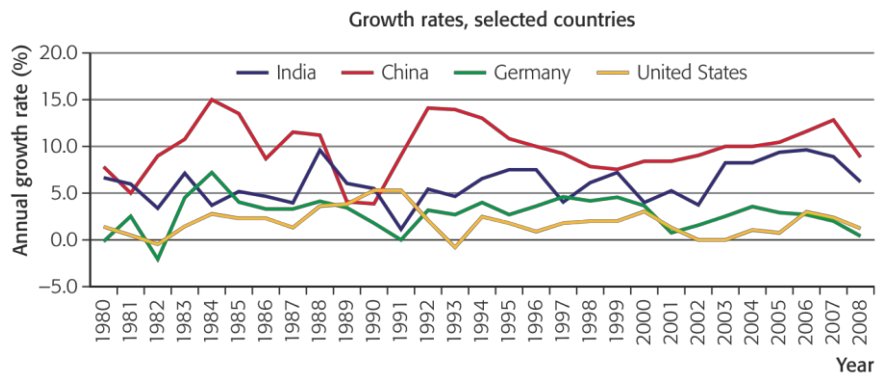


Figure 19.1 A comparison of different growth rates

Source: World Development Indicators, The World Bank

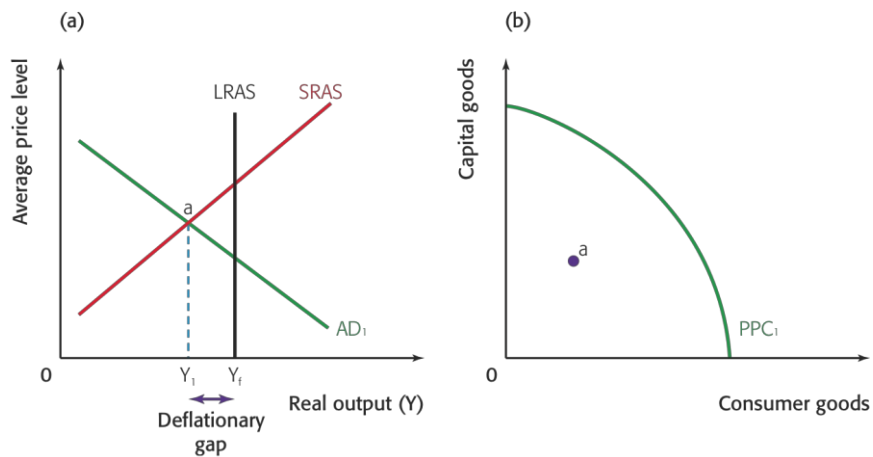


Figure 19.2 A deflationary gap/output gap

Economic growth

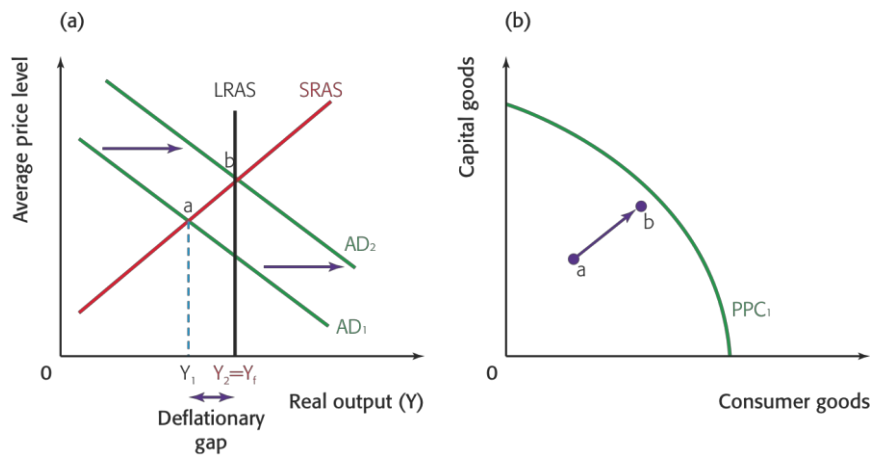


Figure 19.3 Economic growth to remove a deflationary gap/output gap

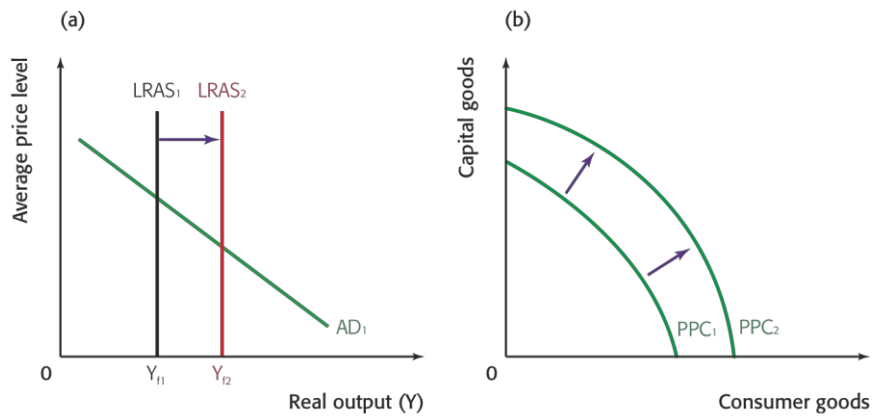


Figure 19.4 Economic growth through an increase in potential output

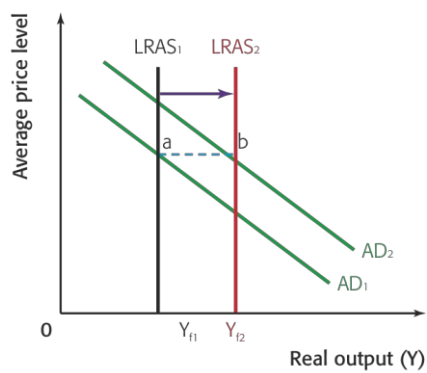
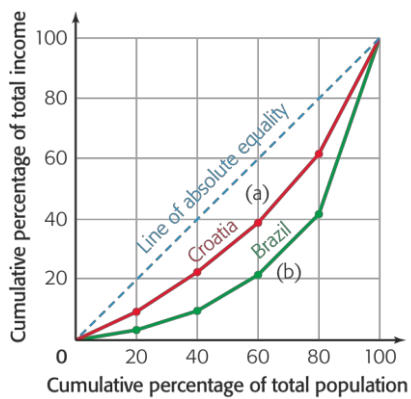


Figure 19.5 Non-inflationary growth

Equity in the distribution of income



(a) = area between line of equality and Lorenz curve

(a) + (b) = total area under line of equality

Figure 20.1 Lorenz curves for Brazil and Croatia

Why do countries trade?

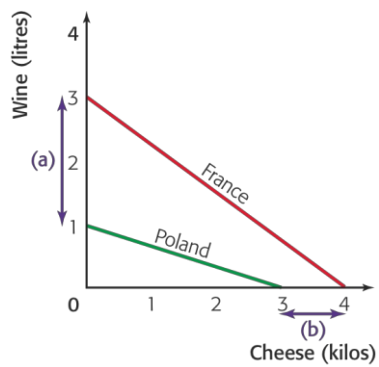


Figure 21.1 Production possibilities curves to show comparative advantage

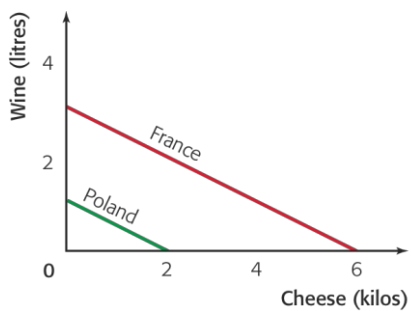


Figure 21.2 Identical opportunity costs

Free trade and protectionism

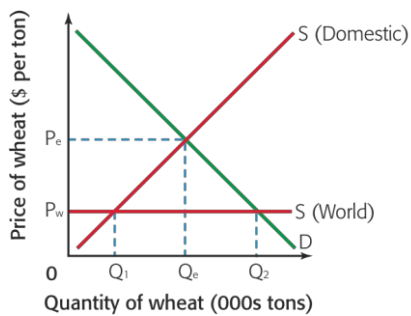


Figure 22.1 Free trade in wheat

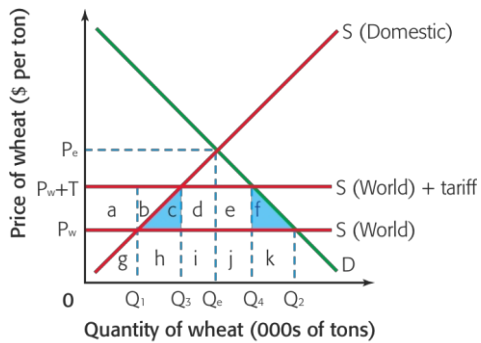


Figure 22.2 A tariff on wheat imports

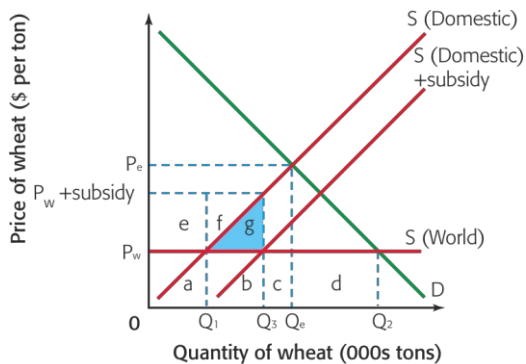


Figure 22.3 A subsidy on domestic wheat production

Free trade and protectionism

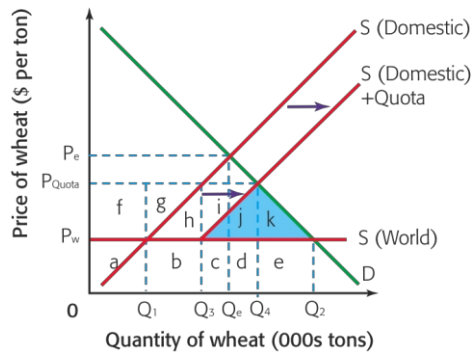
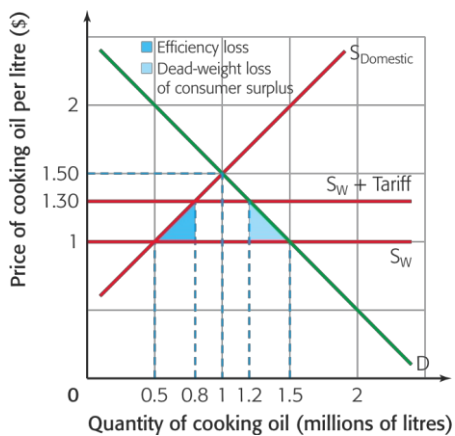
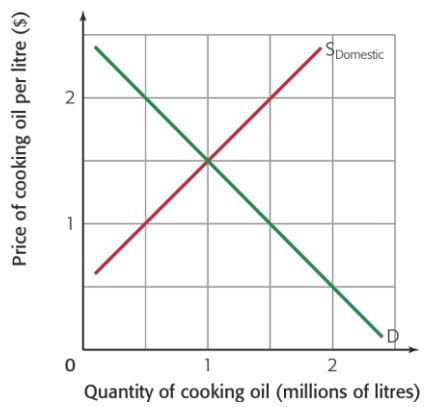


Figure 22.4 A quota on wheat imports



Free trade and protectionism



Exchange rates

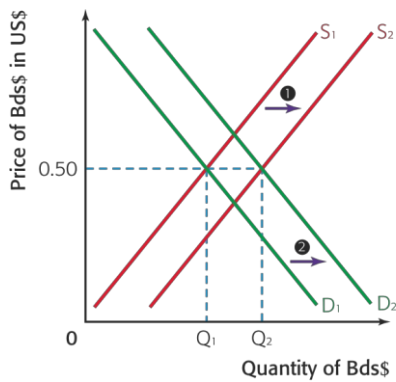


Figure 23.1 An increase in the supply of Bds\$

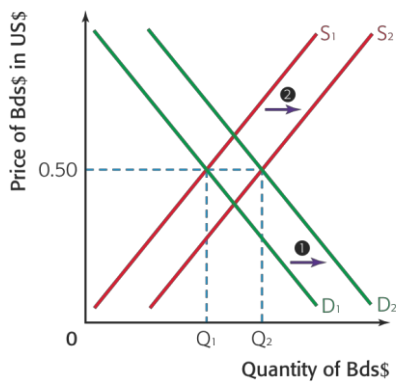


Figure 23.2 An increase in the demand for the Bds\$

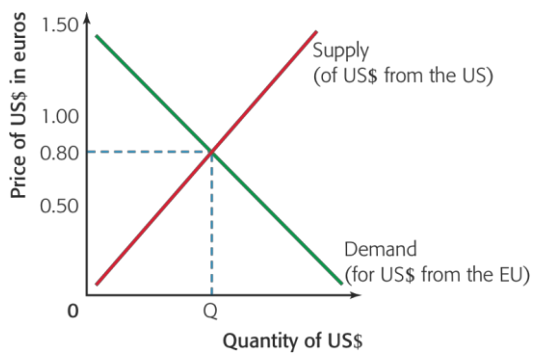


Figure 23.3 A floating currency

Exchange rates

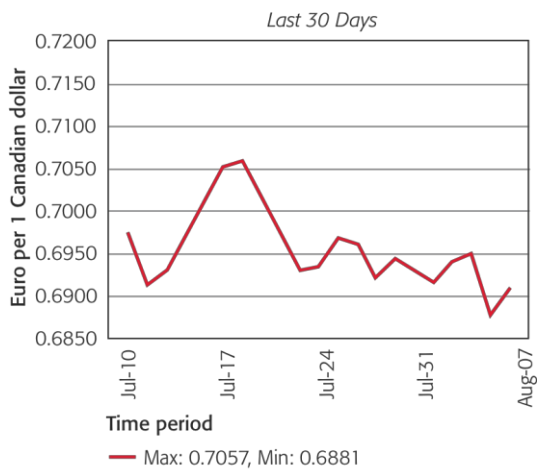
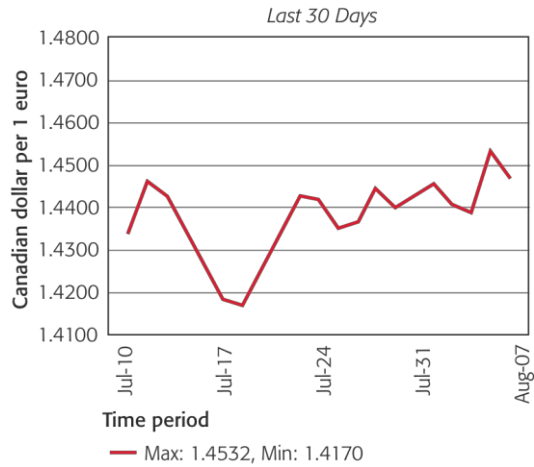


Figure 23.4 Changing values of the Canadian dollar and the euro

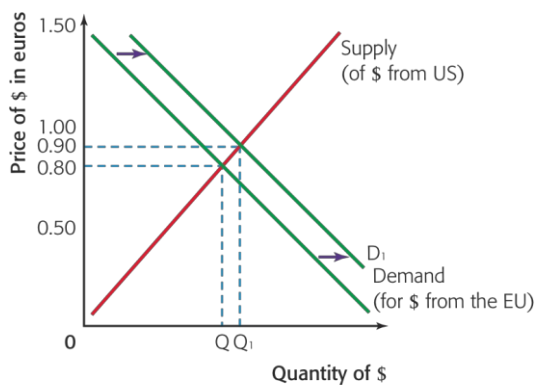


Figure 23.5 An increase in the demand for the US dollar

Exchange rates

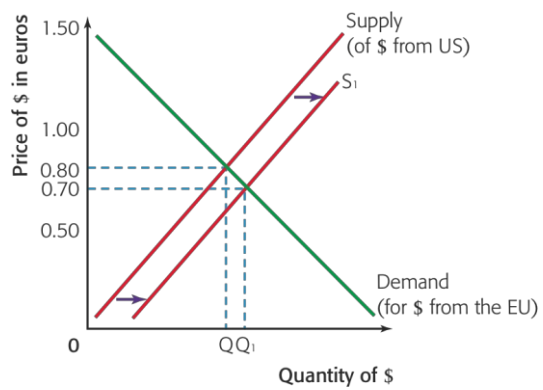


Figure 23.6 An increase in the supply of the US dollar

Balance of payments

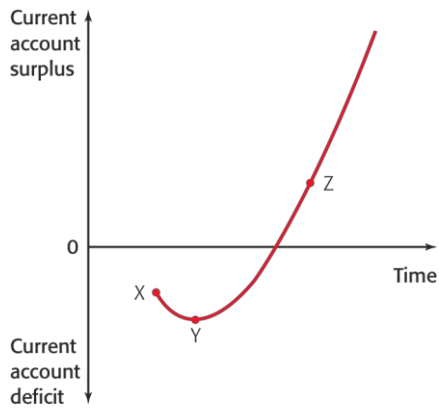


Figure 24.1 The J-curve

Economic integration

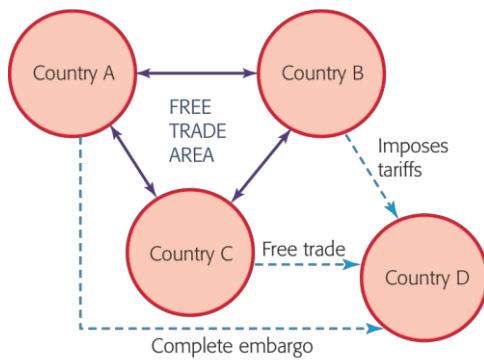


Figure 25.1 A free trade area

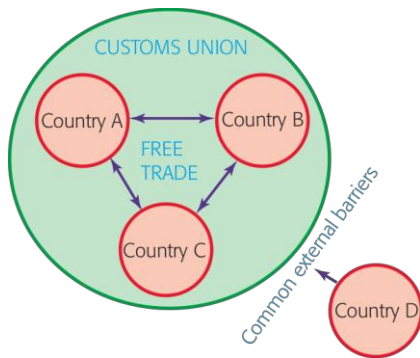


Figure 25.2 A customs union

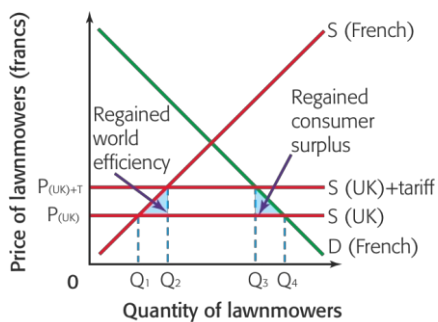


Figure 25.3 Trade creation

Economic integration

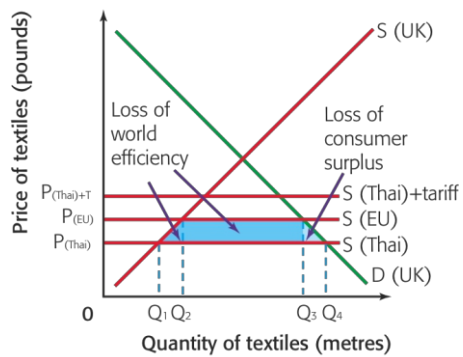


Figure 25.4 Trade diversion

Terms of trade

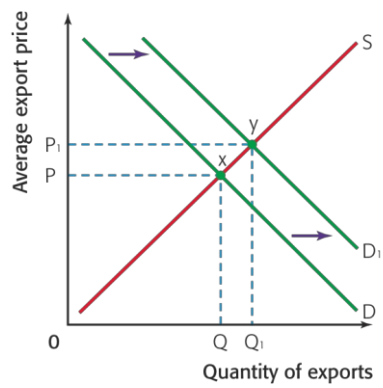


Figure 26.1 An increase in demand for exports

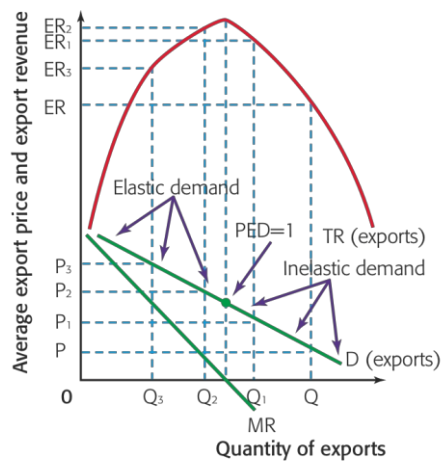


Figure 26.2 The demand for exports and export revenue

Terms of trade

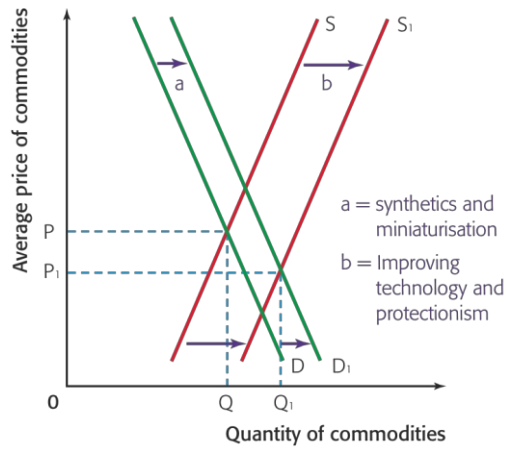


Figure 26.3 Falling world commodity prices

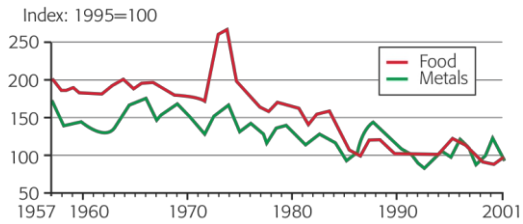


Figure 26.4 Falling commodity prices

Economic development



Goals	Quantifiable Targets	Indicators
Goal 7: Ensure environmental sustainability	Target 7a: Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources	7.1 Proportion of land area covered by forest 7.2 CO ₂ emissions, total, per capita and per \$1 GDP (PPP) 7.3 Consumption of ozone-depleting substances
	Target 7b: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	7.4 Proportion of fish stocks within safe biological limits 7.5 Proportion of total water resources used 7.6 Proportion of terrestrial and marine areas protected 7.7 Proportion of species threatened with extinction
	Target 7c: Reduce, by half, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
	Target 7d: Achieve significant improvement in lives of at least 100 million slum dwellers by 2020	7.10 Proportion of urban population living in slums

Source: UNDP

Figure 27.1 Quantifiable targets and indicators for Goal 7

Measuring development

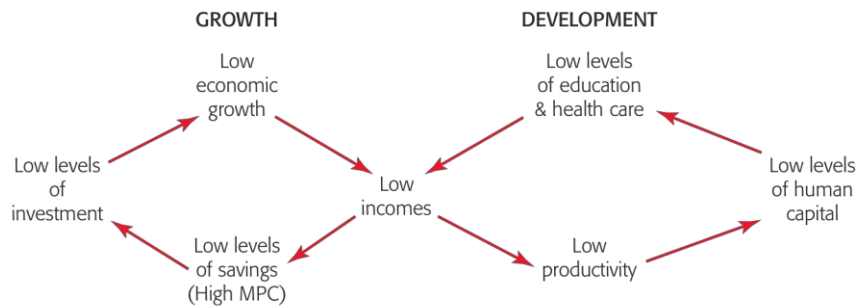
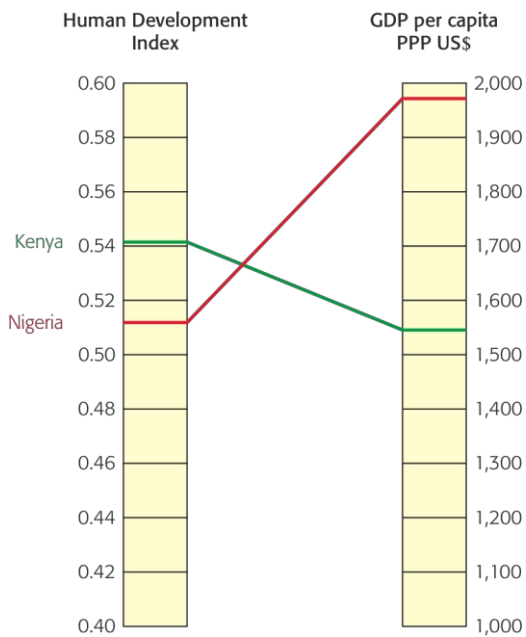


Figure 28.1 Examples of poverty cycles



Source: Indicator table H of the Human Development Report 2009

International trade and economic development

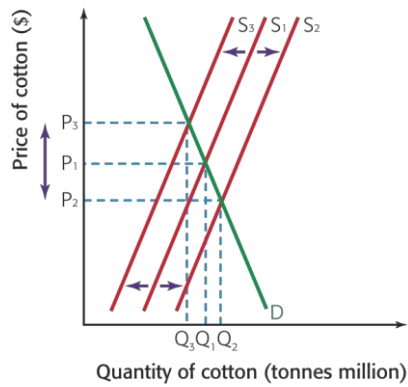
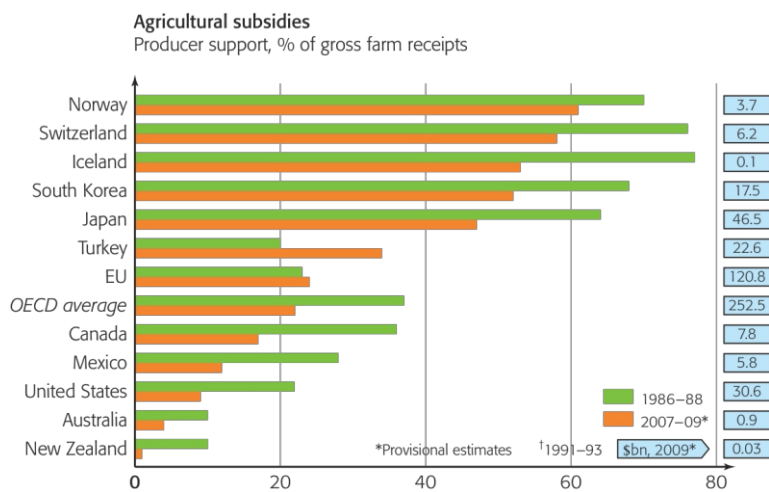
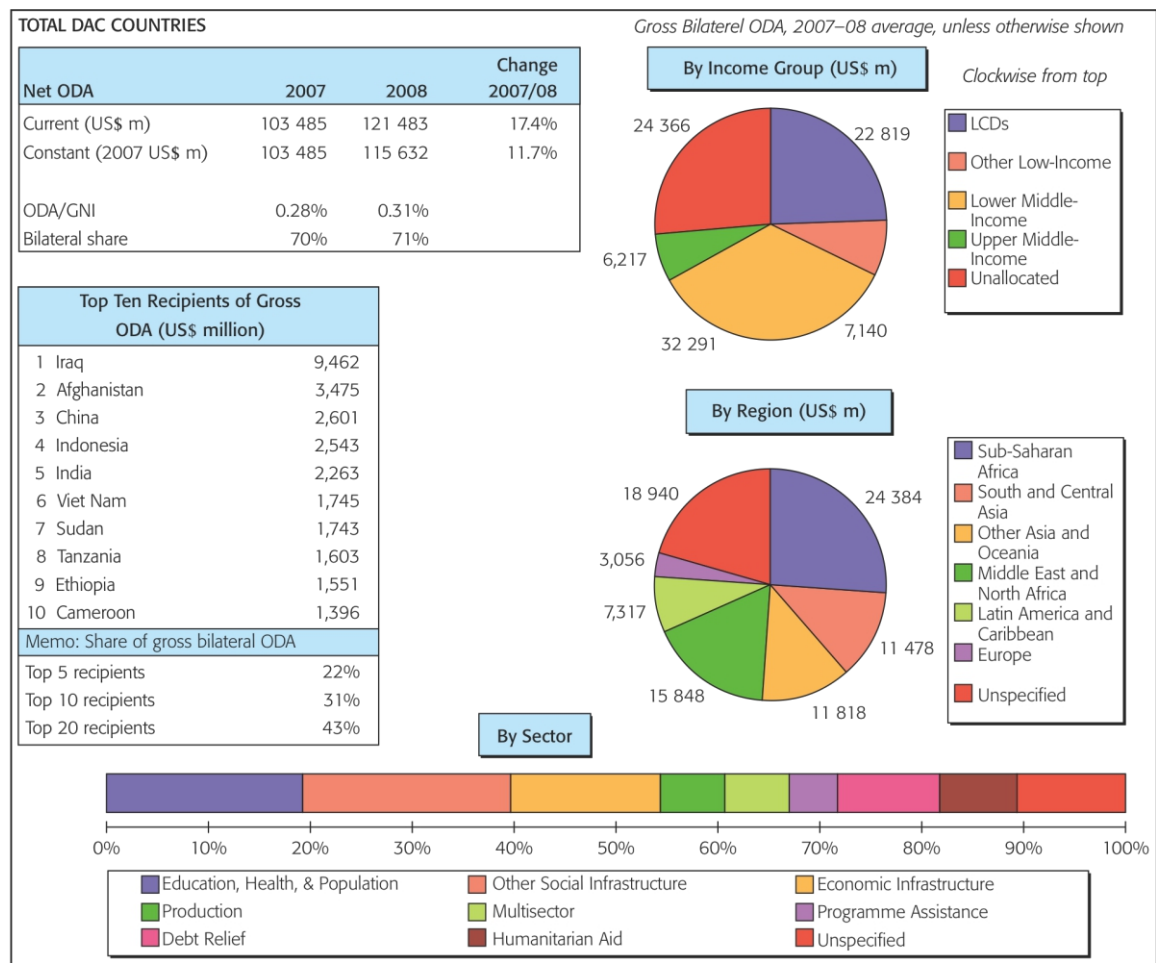


Figure 30.1 The world market for cotton



Aid, debt, and economic development



Source: OECD – DAC: www.oecd.org/dac/stats

Figure 32.1 ODA statistics for 2007/2008

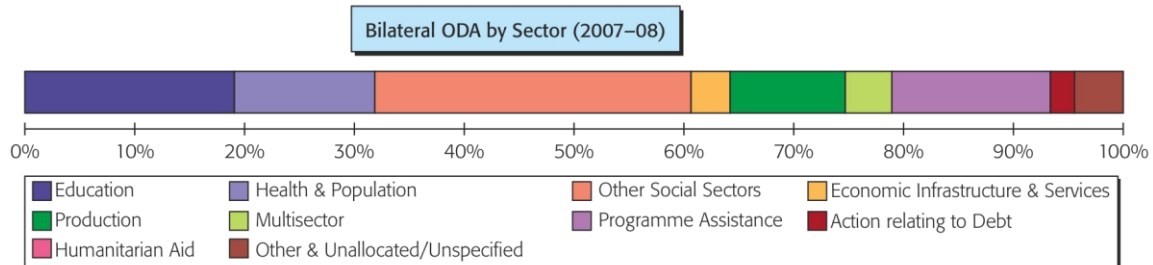
Aid, debt, and economic development

Benin

Receipts	2006	2007	2008
Net ODA (US\$ million)	374	474	641
Bilateral share (gross ODA)	61%	51%	48%
Net ODA/GNI	8.1%	8.7%	9.6%
Net Private flows (US\$ million)	15	35	4

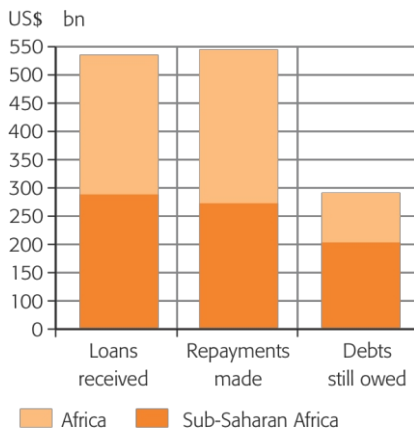
For reference	2006	2007	2008
Population (million)	8.1	8.4	8.7
GNI per capita (Atlas US\$)	570	610	690

Top Ten Donors of gross ODA (2007–08 average)	(US\$ m)
1 EC	105
2 IDA	78
3 France	72
4 Denmark	46
5 AfDF	41
6 Germany	38
7 Netherlands	35
8 United States	30
9 Belgium	19
10 Arab agencies	17



Sources: OECD, World Bank www.oecd.org/dac/stats

Total ODA receipts are in the top left table, as is the percentage of bilateral aid. The aid sources are in the top right box. The uses/targets of the aid are given in the bottom boxes.



Source: UNCTAD/World Bank

Figure 32.2 Africa's debts 1970–2002

Aid, debt, and economic development

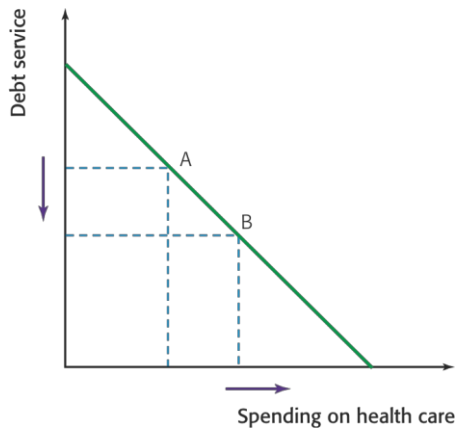


Figure 32.3 A government "Spending Possibilities Line"

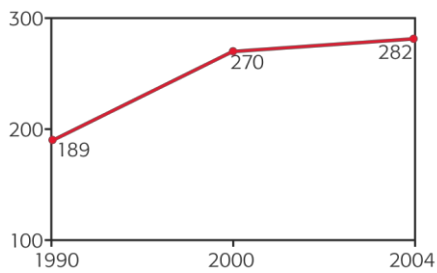


Figure 1 **Gross domestic product** (US\$ per capita)

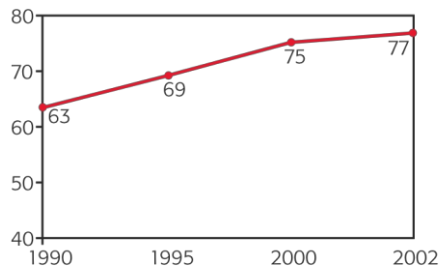


Figure 2 Literacy rate (percentage of adults)

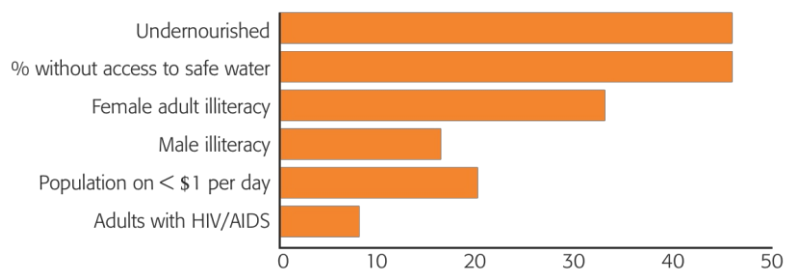


Figure 3 Poverty percentage